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Sorghum Department.

Prof. Henry, of the University of Wisconsin, favored us some weeks since with a copy of his "Experiments in Amber Cane, and the Enslavement of Fodders at the Experimental Farm of the University of Wisconsin," being his second annual report. To say that it is a carefully prepared and an exhaustive report of his work and observations is but to tell our readers what they, those of them at least who know him, fully realize. We shall have the pleasure of using portions of it from time to time, and can assure our readers they will find it very profitable reading. The following are from reports made to him:

O. S. Powell, of River Falls, on the subject of skinnings, says he runs them into tanks to be made into vinegar. He says: "We make the best of vinegar by merely giving it time to work, and then pass it from one tank to another for the purpose of straining and filtering. Six thousand gallons were made last fall in this way, than by the first of June will be better vinegar than is obtained from any other source, not excepting old cider or maple sap." This vinegar is made at scarcely any appreciable cost, and the idea is well worth being adopted by other syrup makers.

Ambrose Warner, Whitewater, says: "I fit my land as though I were going to plant it to onions, then I always get a good stand. Go over with a drag last; that fills up all the horse tracks and leaves it ready for the planter."

I plant three feet eight inches between the rows, and from two and a half to three feet in the rows; plant about one inch deep; drag before planting. When the cane is up bring the shields (on the cultivator) within two inches of each other, and by driving slow can do a nice job as I have no lumps to bother. When the cane is two or three inches high, clear out the weeds in the hill, then cultivate same as corn. When ready to cut I take a saw-buck, made longer than for sawing wood, set it between the second and third row, cut four rows and throw on the horse. When I have enough for a bundle, bind it and cut off the tops with one blow of the corn knife. Then lay the bundle over next the standing cane, and so as to have the bundles of next four rows cut laid on them. Bind and set up my seed heads, then rake up the leaves stripped off with a horse-rake."

Edwin Blood, Stockbridge, on the subject of manufacture, says: "Heat the juice in the defecator to about 150 degrees; add milk of lime until the juice shows by blue litmus paper slightly acid, or until the paper shows a light pink color. Heat rapidly until the serum turns dark colored. Let it stand a few minutes then draw into evaporator; then skim and evaporate as rapidly as possible to 228 or 230 deg. If above instructions are carried out, one cannot fail to make light colored, clear syrup perfectly free from that detested sorghum taste, and which will sell at any time in any market."

As for the cost of making syrup, much depends on the state of the weather, ripeness of the cane, machinery and help employed. In the fall of 1881 it cost me 11 cents per gallon for manufacturing, and the past fall (1882) only 7 1-6 cents per gallon.

Evan Erickson, of Stevenson P. O., La Crosse county, submits a detailed statement of total cost of raising and manufacturing ten acres of cane, which being condensed to save space, foots up as follows:

Preparing the ground.....	\$ 20 50
Planting and cultivating.....	36 00
Harvesting and cleaning.....	55 37
Boiling and refining in manufacturing.....	55 37
Board of men and teams.....	81 55
Barrels for syrup.....	31 00
Hauling syrup to market.....	31 00
Total cost.....	\$387 42
Cr. by 1,570 gallons syrup, sold at 40c.....	\$628 00
Deduct expenses.....	387 42
Net profit.....	\$240 58
Net profit per acre.....	\$24 05

Hollister, S. Phillips, of Mindoro, La. Cross county, writing of the value of seed, says: "The yield of seed, as near as I could estimate, was 22 bushels per acre. One hundred and eight pounds of seed yielded sixty-six pounds of flour. We used cane-seed flour in our family from the time of threshing in November till the next August. For griddle cakes it is nearly equal to buckwheat (some of our neighbors claim it is superior), and mixed equal parts with buckwheat, we could see no difference. For soft ginger cake it is excellent."

* * * As a feed for cattle, horses and hogs I know it has no equal. There is no grain that will make a horse gain in flesh faster. For milch cows a person cannot estimate its value till he has tried it. It is especially valuable for young stock and calves and for hogs. I know that it is worth more per bushel than corn, and when I say more I mean that there is a great difference. In the spring of 1881 we killed a hog that had been fattened wholly on cane seed. The meat was as hard and sweet as I ever tasted. This hog was fed on nothing but cane seed and water, yet it took on flesh faster

than any hog I ever fed. * * * Some farmers complain of the expense of harvesting it. Now, does it pay to pick up an ear of corn after it is husked and thrown on the ground? One head of cane seed will yield as much feed as an average sized ear of corn."

Just Like Honey.

ED. RURAL WORLD: In most new industries it is usual to improve the quality of the products to increase the quantity and to cheapen the cost. I regret to inform the RURAL WORLD that sorghum progress seems to be a retrograde advance backward, and that each decade shows inferior syrup. Napoleon once bitterly told his soldiers, "ye are not what ye were." Sorghum syrup is not what it was 20 years ago. All the old sorghum men, men with gray beards and shrunk shanks, tell me that 20 years ago they made sorghum "just like honey." It is curious to hear these old men, from widely separated States, agree on the phrase, "just like honey." The bee adopts no new processes and requires no improved machinery; it has no special literature and makes no improvements. Honey was as good 1,000 years ago as it will be 1,000 years hence, and honey is the best and highest priced syrup, and thus the phrase, "just like honey," implies the perfection of syrup-making. Honey is, and always has been, worth from a dollar and a half to two dollars and a half a gallon. The demand has never been supplied and is practically unlimited. The man who can make sorghum "just like honey" has a bonanza with a prodigious pay streak. Sorghum gives from 100 to 200 gallons of syrup to the acre, and if it can be made "just like honey" with the simple apparatus and the apparently simple abilities of these veterans, it seems singular that these numerous gentlemen are not still making "sorghum just like honey."

The old sorghum maker, whose note was as good as a government bond, and whose word was as good as his note, told me that 20 years ago, in Virginia, he made "sorghum just like honey." Everybody thought it was honey, but my wife, who had one of the d-testers you ever saw, she knew it was sorghum. Wishing to get the bottom facts, I saddled a mule and interviewed the old lady. She said that 20 years ago they made "sorghum just like honey, but she knew it was sorghum." There is no use trying to offset such evidence; there is so much evidence and the witnesses are such clever old men. The sorghum bugs had better blow a retreat. Kansas has employed the most costly apparatus yet invented; it has been assisted by professors of chemistry and by trained Louisiana experts and Kansas has made good sorghum and a great deal of it, but Kansas has made no sorghum just like honey. In the old Green play the old men recounted the great deeds they had done. The young men boasted of the still more wonderful deeds they were going to do and the middle-aged modestly narrated their prosy performances. The old men could exaggerate, for their witnesses were dead. The young men could embellish, for they had no witnesses, but the middle-aged and their deeds were known to their audience and they were compelled to draw it mild. There is something like in the sorghum business. The old men made "sorghum just like honey," the young men are going to make glittering heaps of sugar and superb syrup, while the middle-aged lay low, sing small and think "a heap" of things. I do not accuse the old men of wilful perfidy; they are too clever and evidently made tolerable sorghum, but if they had their old samples to compare with the sorghum of to-day, they might drop the phrase "just like honey." If the young men could see their samples they might justly claim improved quality, but in a lower voice. RURAL WORLD, can you say something for to-day?

J. E. A. R.

Recent Inventions Patented.

With the growth of the Northern sugar cane industry will gradually but surely come a perfection of implements and appliances essential to the successful harvesting and working of the crop. The following notices from the *Scientific American* are evidence of this:

A bagasse furnace of improved form has been patented by Mr. John Hill, of Independence, Kas. The object of this invention is to construct a furnace in which green bagasse may be used for fuel in the manufacture of sugar and molasses in localities where fuel is expensive. The furnace is provided with a chute through which the green fuel is passed, and where it will be exposed to the heat of the furnace, so that by the time the fuel reaches the fire grate it will be perfectly dry and ready to burn.

A machine for washing bagasse and extracting the saccharine matter therefrom has been patented by Mr. A. S. Wheeler, of New Orleans, La.

The process consists in passing the bagasse between compressing rolls, these being arranged within a hot watervat and dissolving the saccharine matter exuding from the bagasse while passing through the rolls. An ebullition tank is likewise provided, as well as telescopic tubes for injecting liquid and steam upon the bagasse.

A very ingenious machine for harvesting corn and sugar cane has been patented by Messrs. O. H. Judd and C. T. Rawalt, of Fairfield, Neb. The stalks are guided between two rotary cutters by a frame suitably constructed for the purpose, and after being severed the stalks fall upon an endless apron, which is driven by the revolution of the vehicle, and carried to the dropper, when they are deposited in rows on the ground.

The machine presents many advantages not heretofore obtained in this class of harvesters.

Wood Charcoal—Chinch Bugs.

Will you please answer the following in your sorghum column:

Would common wood-charcoal make a suitable filter for juice?

Does presence of chinch bug on cane injure the syrup? Yours, J. P. C.

Memphis, Mo., 9 June, 1883.

There is no economical method known for filtering unclarified cane juice. The bugs retard the growth and development of the cane, and of course lessen the quantity of juice.—ED.

Growing Crop.

COL. COLMAN: You ask for reports of the growing cane. I have twenty-five acres planted, it is now three feet high, and looking well. I moreover expect to plant more as the season advances. Last year's crop sold readily here at 50 cents. D. D. T.

Arkadelphia, Ark.

NOTE. This is the kind of report we want from hundreds of our readers. Only in quoting the acreage planted this season say also that of last.—ED.

EDITOR RURAL WORLD: My Missouri Early Prolific cane is about two inches high, and is the largest I have. It grows faster here than the Amber. On May 20th the ground froze one-half inch. May 21 and 22 we had heavy frosts, but through it all the Missouri

Prolific only turned purple for two or three days, then became green again and went on growing. The Amber would have died to the ground if it had been up.

I believe the Prolific cane is going to rival the Amber for northern cultivation. Mr. Thompson has shown that it stands better and makes more and better syrup. I shall see how the fall frosts will affect it. I have found an iron-toothed garden rake, filed sharp, a good thing for cleaning weeds and pigeon grass out of cane hills. But it should be used early and often.

J. G. B.

Plymouth, Ia., June 5, 1883.

A larger area of Northern Sugar Cane has been planted this season than ever before, by many thousands of acres. This is the result of successes during past years, and of unbounded confidence in the crop as an industry not only adapted to our soil, climate and necessities, but one in which there is more money with less risk than in many of the staple crops of the country.

Success however involves care in cultivation—as in all other crops—experience in gathering at the right time and practice with the mill and evaporator. It involves careful preparation for working up, having all the machinery at hand, in place and in condition for work and provision for accidents and emergencies; for a breakdown in the midst of harvest, hundreds of miles from the machinist causes annoying delays and eventual loss.

The teams and wagons, the buildings and the employees must be at liberty and beyond contingency at hand and ready for work. For unlike other crops we cannot gather the cane and stack it in the fields like corn or wheat or oats, it must be crushed at once and worked into the shape it is to take on the market. Provisions must also be made for the disposition of the product when ready; a market must be created, so to speak, that the producer may realize on his industry and not have it lie idle or begging for buyers.

The cultivation of Northern Sugar Cane being a pronounced success and the syrup produced not only a purer, but a better and more wholesome article for food, it only needs that the consumer be advised of the fact to have him make provision for securing his supplies the moment they are ready. To this end every farmer growing cane with the intention of working it up should adopt some means of advising the people of the fact that they may come to the factory with their jugs and kegs and their money.

Last year scores of people ignorant of the quality of the syrup, now made, discovered when too late that the supply was exhausted. This year the demand ought to be prompt and the prices good, and will be if the article is of the quality called for. Make your business known to the people of your neighborhood, and not have it lie idle and ready to burn.

We learn from the Benton Record that while a Mr. Wright was getting ready to load a car load of hogs at Oran the other day, he laid his coat down and a hog got hold of his pocket-book and destroyed about eight hundred dollars. That hog ought to have been laid on by the old sow and mashed when it was a pig.

The wheat fields of Missouri and Kansas are pretty generally headed out.

There are some very good fields, where the ground is thickly covered, and on those the yield will be excellent.

On others the stocks stand thin, and the yield must necessarily be light. On the whole, we cannot count on a crop much over half as large as that of last year.

Kansas City Journal.

A Pennsylvania farmer early last spring placed in an old pond 60 feet square, eleven German carp. November 9th the pond was drained, and 2,230 carp were captured, ranging in length from 4 to 6 inches. One postal card every week or two would answer all these questions.

No movement has been made this season towards utilizing the splendid sugar making machinery of the Faribault Amber Cane Refinery. It is a pity that it should lie idle, with so fine a prospect of syrup will command a good price.

ENLARGING.—We learn from Hon.

Seth H. Kenney that he is introducing

two boilers of 98 horse power in his

Amber cane works. He has disposed of

all the syrup manufactured by him last

year, and could have sold more if he had

it. People are learning the difference

between the pure article and glucose

preparations. The season has opened

very unfavorably for the planting, on

account of its being so cold and wet, but

Mr. Kenney will plant as usual and trust

to good cultivation to get through all

right.—Faribault Republican.

State and General Items.

Farmers are complaining of the ravages of wire worms and ants on their growing crops.

Just such a gooseberry crop was never seen in this part of the country, and hundreds of gallons are being taken to market.

Every day for the last thirty days wheat has improved and will make about a three-fourths crop or 600,000 bushels in Lawrence county.

Farmers are consoling themselves by the thought that if wet weather will not make corn, it will make hay. The crop of the latter promises to be unusually large.

Corn planting is, this season, a laborious work, having in many cases to be replanted two and three times; much of the seed was infertile for one thing, and the cold and wet another.

Horses and mules now command higher prices than for many years past. A reasonably fair horse can now be purchased for less than \$150 and from all the way up to \$200 or more.

The reports of the condition of the wheat crops in Carroll county is not encouraging as might be hoped for. From a half to three-fourths of an acre crop is predicted by the best farmers.

Mr. B. Swarthout showed us (Macon

Home Press) a strawberry grown in his garden that was four inches in 2 1/4 inches in circumference. It was the largest one we ever saw, and was of the Manchester variety.

Hon. Tom Carroll, of Pike Co., while stretching a barbed wire fence at his farm on Thursday morning met with a very painful accident caused by the strand being jerked from off a post. The hand that grasped the strand was laid open to the bone.

J. C. Robb raised last year 33,100 pounds of hemp on 21 acres of land, an average of 1,576 pounds to the acre. The hemp was of very fine texture and was sold and delivered last week to Mr. E. Sparks at \$3.50 per 100 pounds.—Jes-
samine, Ky., Journal.

Mr. John Warner, the strawberry champion of Bollinger county, made his first appearance of the season last Friday. He sold his cargo of thirteen cases of strawberries without any trouble, and promised to return with another load this week.—Jackson Cash Book.

Reports from the Illinois corn fields are not very flattering as to the prospects for a crop. The farmers are getting seriously alarmed. The damp, cold weather which has prevailed has caused much of the seed to rot in the ground, and there must be a good deal of replanting.

The Kirksville creamery is running in full blast. Messis, Blackman & Sons turned out during four days about 700 pounds of choice butter. The product per day from the present outlook will be more than trebled within three or four weeks. Farmers are taking a lively interest in the business.

The pigeon roost near Oregon, this state, must be a prolific institution, except for the pigeons. It is said that many single parties make from \$175 to \$250 per day in procuring squabs, or fat young pigeons for St. Louis epicurian palates. They (the squabs not the pigeons), are taken by the millions.

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The Shepherd.

Edited by R. M. Bell, Summerville, Texas county, Mo., to whom all matter relating to this department should be addressed.

Heavy Shearing Ewes of Sedalia.

E. B., Genesee, Wis.—“Why didn’t the Sedalia, Mo., shearing festival this year produce as heavy ram fleeces as last year and the year before? And have heavy ewe fleeces become the standard?”

We cannot tell. Let some one who was there tell our Wisconsin friend why the results seem so peculiar in this matter. There was a fairness about it that we noticed with pride. For instance, the McCulley ewe that sheared 26 1-4 pounds last year beat her record this year half a pound. Such a record is good proof of fairness. We once saw a yearling ewe sheared in Wisconsin that was a beater, but the next year she sheared only a fraction over 12 pounds, which showed something was wrong somewhere. We think our Missouri sheepmen can take care of themselves and their record. They are watching each other closely. There is close competition in good points. Each is afraid of being beaten by some sharp tricks. If all the banters are accepted, we look for some wonderful ewe fleeces next year. They are made, too, in good faith; it is no boy’s talk. Missouri means business in the breeding of Merino sheep.

R. M. B.

Training a Shepherd Puppy.

As I am a subscriber of the *RURAL WORLD*, I thought I could not consult any better authorities than you. I have a Scotch collie eight months old; she is afraid of the whip, and is also very timid otherwise. She is partly broken now, that is, she will go after sheep, but does not mind very well when called. I want her to drive cattle. If you, or any of my fellow-subscribers know of any way of getting her used to the crack of a whip, I wish you would let me know. By doing so you will oblige

J. E. Y.

St. Louis, Mo.

REMARKS.—The matter of training a shepherd dog is one needing firmness, kindness, patience and perseverance. In fact, about all the Christian graces. Then a man to train them well must be able to make the dog his companion and confidential friend, to whom he can talk and be understood. A smart man, as well as a fool, can train a shepherd dog, and yet many a fairly endowed man is a bigger fool than a shepherd dog, and can’t learn the knack it is done by. I know how such a man feels. I pity him, and still have a tender side for him. Will not our brethren who know how to train shepherd dogs give us their experience? We need to have well trained dogs on all our stock farms. They are as much help as a man to the man who knows how to manage them.

R. M. B.

The Dog Question.

A correspondent has stirred the dog question. As I remember that the same question has been mooted for over forty years without any great result from legislation in other States, and as history proves that no reform was ever yet accomplished by prohibitory statute-making, allow me to make a suggestion. It is utterly useless to try to make all people do without dogs, so long as suspicious characters prowl around neighborhoods and thieving or robbery are practiced. If dogs were not wonderfully adapted to some want of man, they would long since have been exterminated. Let us then, like wise men, hit on some plan of regulating the necessary evil. There are breeds of dogs that are the most valuable of all, and are harmless. The shepherd dogs will not injure stock, and are excellent house guards. Now, any man that will keep a shit of poor breed, ought to be fined. Abolish, exterminate the fices and inferior breed, by a law requiring proper officers to dispose of the she ones, and fining heavily any person who keeps any such, save those of pure shepherd stock. This matter must be regulated, not prohibited; because laws to regulate are enforced generally, whereas laws to prohibit do become a dead letter, unless there is constantly active opinion in their favor. A statute could be devised and enacted that would, within a very few years, free the State of Missouri of hundreds of thousands of miserable fices and other mean dogs that are a curse to the country.

There is no disputing about tastes. Every man values highly his own dog. I have seen men fondle the most inferior mangy curs with loving touch. And there are dogs that actually are most human in sense. It seems to me that only by encouraging some very excellent breed and strongly discouraging all others, can the evil be met and corrected.

C. J.

Mr. Barlow's Sheep.

What time has his lambs been coming? Has he been letting the rams run with the ewes the year through, as is the usual way down in Missouri, so the lambs come at all seasons of the year? Has he been breeding in and in until the constitution of his flock has become weakened? Do his sheep have the fence corners for stables or do they have clean, airy littered sheds to lamb in? Well fed, sound sheep ought to do better than he reports, even if allowed to roam in the woods, even such a winter as the last has been. No lambs are harder than Merino lambs after they once get dry. They are born with a wet blanket on and are apt to chill if it is cold as blazes, but once dry, are safe.

J. R. R.

FOR TICKS ON SHEEP.—Take linseed-oil and add sulphur a sufficient quantity to make it thick like paste. Now take a small paddle and put some of the sulphur and oil on top of the shoulders, rubbing it in well. It should be used just after shearing. One application a year is all that is needed. I have just got through shearing, and I did not find a “sheep-tick” in my flock. Don’t fail to try it.

Is Sheep Husbandry Profitable?

Surely no business rests upon a more solid basis of utility, and it needs no foresight to predict that this interest in this portion of the country is yet in its infancy, and the majority of those engaged in this husbandry are yet in their swaddling. If men in Vermont, New York, Virginia, Ohio and other States where land is worth from \$75 to \$140 per acre, have become wealthy and are among the solid men of those States by a continued perseverance in this particular branch of husbandry, surely we, in this portion of Kansas where land is only worth from five to ten dollars per acre, ought to make it profitable, and if we do not, we surely cannot lay the fault to either the country or the sheep, but must take it upon ourselves. There are but few countries better adapted for wool growing than this, and in our judgment all that is necessary to succeed in this branch of the business is to give it our careful attention, study the peculiar habits of our flocks, adapt ourselves to their natures so that we thoroughly understand the nature of the animal we have to deal with, then success is ours. Those who lately started in the business, and have not met with the success which they anticipated, and had reason to hope for, should consider well the matter before giving it up, and see wherein the faults lie, if they have been disappointed in their investment. Nine out of every ten who have failed (if any have) can trace the cause to their own neglect and carelessness, and would fail in any other business.

I see several flocks in the country that have the scab. This is a shame, and no man that has any pride will allow it among his flock—unless he got possession of the flock just as severe cold weather set in—in which case he is exposed, but in no other. This pest can be got rid of in twelve days, and I feel in saying that I would guarantee a permanent cure with but two dippings, but I should use none of the nostrums sold by jobbing houses. Make your own, then you know what you have, what you can do, and know the strength of your dip.

Carelessness on the part of breeding is among the greatest drawbacks. Allowing lambs to be dropped any and all times through the Winter; consequently they are chilled, or frozen to death. For every lamb lost and thrown out of the pen, is the same as throwing two dollars away, never to be recovered. April 20th is early enough to have lambs come in this country, and upon this basis we shall make an estimate of a reasonable profit on 500 ewes, the cost of which is \$1,500. Allowing our lambs to come as above stated, and allowing twenty per cent loss (which is very large) we shall have 400 lambs at two dollars per head, \$800; 500 fleeces at an average of twenty-six cents per pound, net, and five pounds to the fleece (low) \$650; total for wool and lambs, \$1,450, lacking but \$50 of first cost the first year. The expense of keeping the flock will depend upon how it is kept and who keeps it. I kept such a flock through the Winter of '81-'82, at a cost of \$00 of mutton or perhaps the worth of two dollars. The flock was allowed to run out in stalks, on wheat, rye and buffalo grass, (and, by the way, I claim that it is a benefit to growing wheat to have sheep pastured upon it during Winter and Spring.) They had all the straw they wanted which was fat enough for mutton any time during the Winter. I would not feed corn to sheep, as they are better off without it, and I did not lose a sheep during the year.

While many are satisfied that raising wheat alone is not a rapid road to wealth, and corn less so, except in favored localities, we are looking around to see what we can best do to succeed financially in our present location. Many, very many, think that there is but one sure way, and it is raising cattle. Overlooking many other things that would be more profitable, all things considered, our country is almost void of fence. Every man having fifteen or twenty head of cattle is obliged to hire a herder, and this expense more than uses up the profit, as cattle are hard to keep upon a small piece of ground where growing crops are in sight, while the same amount invested in sheep can be handled by the smallest child with a dog, and comparatively little trouble; they give their fleeces for their keeping, and the increase is your profit.

If any one doubts that sheep in this country is profitable, just go with me to Wellington's, east of Ellsworth, and be convinced,—a man that knows how to handle sheep and how to make money. There is no man who succeeds in any business unless he loves it, and is willing to give it that thought, study and care which all business requires, and none will pay better than wool-growing.

Growing Market Lambs.

In growing market lambs, says the *National Live Stock Journal*, the feeder should remember that the lamb must be sustained on the food eaten by its dam, and she must eat enough for two. This consideration shows that her food must be liberal and of good quality. The lamb should increase in weight at least one-half pound per day if growing for market, and this alone requires a fair ration to produce, and therefore the feeder must deal with ewes suckling lambs with a liberal hand. The ewe must produce a profitable fleece besides growing her lamb and keeping up her own flesh. We have produced most satisfactory results in feeding suckling ewes upon the following combined ration: Ten bushels of oats, nine bushels of corn, with one bushel of flaxseed, all ground together in the meal, and then mixed, at the time of feeding, with one-half wheat middlings. Each ewe had of this one and one-half pounds per day, with about the same weight of fine-cut hay. This was all eaten clean. But the hay is not necessary; equal gain can be made on straw, but in that case the ewe should have two pounds of such a ground ration on straw, and if the straw is cut short all the better. A good shelter is supposed in this case, else such growth on lambs as we have mentioned cannot be made on such a ration, nor perhaps on any ration, in cold weather. This small amount of flaxseed has a remarkable effect in modifying the heating quality of corn. It keeps the bowels in a healthy active condition and prevents all danger of gurgling in the ewe.

SHEEP TICKS.—Make a strong brine with common barrel salt—make as strong as you would to keep pork. Dip your sheep and lambs in it. If it does not kill your tick, repeat in about two or three weeks. This is seldom necessary.

The Mutton Breeds.

Extract from address of Mr. Robert Mitchell, Princeton, Ky., delivered before Indiana Wool Growers' Convention.

Randall classes the mutton breeds as follows: The Leicesters, Cotswolds, New Oxfordshires, Southdowns, Hampshire-downs, Shropshire-down, and the Oxfordshire-downs. The Leicesters, under the most favorable circumstances for their development, perhaps excel others in earliness of maturity, and none make better returns for the amount of food consumed by them. But they require better shelter, keep and care than any other variety. The ewes are not so prolific, nor so good nurses as those of the other mutton families, and their lambs, when first dropped, demand a great deal of attention. The mutton is only medium in quality and owing to its great amount of outside fat, is not generally sought to supply American tables. The origin of this sheep owes much of its excellence to the sagacity and skill of the celebrated breeder, Mr. Bakewell. The Lincolnshire, the Dorsetshire, the Gloucestershire, and New Oxfordshire are large, coarse-wooled and coarse-boned sheep, which have their partisans in particular districts, and are much crossed and intermixed with others, but have not attained the enviable distinction of being improved so as to form a distinct and extensively popular race. The Cotswolds are larger, harder and more prolific than sheep with the preceding, and the ewes are better mothers. They furnish a valuable combing wool and are decidedly favorite sheep with the breeders of long wool in the United States. The Cotswolds, as a breed, are of great antiquity. The Southdowns, the original Sussex or Southdowns, have probably the purest blood, free from admixture during the long period which covers the rise and development of the British wool manufacture and the increase of meat production of any British sheep. Their improvement has been long continued, and is still continuing, apparently without the necessity of recourse to any foreign blood for amelioration of a single objectionable point. The Hampshire-downs this family is the result of a cross between the Southdown and a short-wooled English variety of greater size and better constitution. Some writers conjecture that they have also a slight infusion of Cotswold blood. They are coarser in appearance than the Southdowns, and their mutton sells half a cent less per pound in the market, but they possess nearly all the good qualities of the former and are harder. They are favorites in many parts of England, but have not been introduced extensively into the United States. Shropshire-downs, like the preceding, have been produced by a Southdown cross, is a very hardy short-wooled stock, and most of the flocks have also a dip of the Leicester and the Cotswold blood. They are nearly as large as the last-named families, and they promise to unite to an uncommon degree the good qualities of the short and long wools, being larger than the former and harder, and the ewes are highly prolific and are excellent mothers. Superior specimens of them are to be found in the United States and Canada. The Oxfordshire-down is comparatively a modern family, is of a cross between the Hampshire-down or the Southdown and Cotswold, and the statement above made in respect to the Shropshires will apply equally well to them, though the two families vary in appearance and in several of their minor qualities.

Shepherd Dogs.

As the industry of sheep husbandry has increased within the past few years, these most useful animals have come into greater demand. In consequence, many breeders, partly to advertise their dogs, and partly to exhibit their skill in training them, have inaugurated field trials for shepherd dogs. At these a certain number of strange sheep are procured, a course is staked off, and at its end hurdles are erected with a gateway, and still further on an inclosure, in which is left a narrow opening, through both of which the dogs, after driving three or more of the sheep around the staked course, must make them go within a given time.

When taking into consideration the facts that the sheep and the course over which they are to be driven are both unknown to the dogs, the difficulties of the task are readily seen. But, naturally sagacious as they are, and thoroughly trained to obey their masters' commands, what would seem an impossibility is accomplished with comparative ease.

These trials are of inestimable benefit, as they stimulate careful breeding and thorough handling of the dogs, and place them within the reach of farmers at more reasonable prices than they would fetch were the number of trained dogs less. The purebred “collie,” when raised among sheep, learns to care for them instinctively, and some of these untrained animals have been known to perform acts almost denoting reason: though, to have the dog display his talents intelligently, he requires education, and then his performance's are at times wanting.

A case is recorded of a sheep thief, who carried on his nefarious trade through the medium of a collie dog. This villain had only to designate a particular sheep to his dog as they would pass a flock, and in the dead of night the faithful animal would go and drive the identical sheep from among his companions to a secluded place, where the master, unobserved, would butch er it, and take it off to some neighboring mart for sale.

Another one of these dogs would drive an entire flock of sheep from one town to another, unattended by any one, and no matter how rough the country or inclement the weather, the same dog could be depended on to assemble his flock, and such was the confidence the sheep had in him, that they obeyed his occasional bark as though it was a comprehensive language.

We might illustrate the collie's sagacity in hundreds of instances, but it is necessary, and the temptation is so great to extol upon so noble and valuable an animal, but we must stop somewhere; at any rate, we can confidently urge upon every farmer to become the possessor of one of them. Destroy all other breeds, if necessary, and the end of sheep killing will have been reached, and a truly faithful guardian for them, the cattle, and home substituted.

New Mexico's wool production last year amounted to 30,000,000 pounds. There are upwards of 12,000,000 sheep in the territory, and the clip this year is not expected to be short of 50,000,000 pounds.

Sheep Farming.

Despite the constant attention which is called to the value of sheep, not only as improvers of the land, but as profitable farm animals, for wool and mutton, there are many farmers who have never raised or kept a single sheep, though their farms are adapted to raising sheep largely and profitably. Why this is we can not imagine, for facts and figures can be had by the score to prove the profitability of sheep-breeding, if necessary, and about the only drawback, in many localities, is the loss occasioned by dogs. Many a rough, worn-out, or neglected farm might be brought up rapidly, and be made paying land by breeding sheep thereon, as the manure from the sheep is one of the most enriching of manures and is evenly and finely distributed. Of course they may not do this without being fed something besides what they can get in the fields, yet this additional food works to the profit of the breeder in two ways—it not only insures a good and profitable growth of flesh and wool, but it makes the manure richer and more valuable. Even poor farmers can give sheep a trial, by commencing in a small way and then, as means and experience are gained, the flock can be gradually increased by purchases, though the natural increase from a small flock of sheep is by no means inconsiderable, if properly managed and cared for as they should be. Like any other kind of stock, they must have good care and food to secure the greatest measure of profit.—Philadelphia Farm and Garden.

Flock Notes.

H. V. Pugley, of Plattsburg, Mo., sold a Merino ram last week, to go to Nebraska, for \$100.

A herd of 15,000 California sheep of Merino blood, have just passed into the hands of G. W. West & Co., a Texas firm, at \$60,000. The same firm are negotiating for another lot, of 20,000 heads.

Out of two hundred Sussex-down lambs, lately arriving in an English flock, there were fifty-seven pairs of twins. These were out of one hundred and forty-nine ewes. This is a flock record which is pretty hard to get over.

A great many high-class yearling lambs are coming into market, and are selling right along at top prices. They make an excellent grade of mutton, and are in steady demand. Some have sold this week as high as \$7.25 per ewt.

R. T. McCullum & Bro., Lee's Summit, Mo., writes: “Since returning from Vermont I have sold 21 rams to A. Branshaw, Abilene, Texas, for \$840; to T. J. Miller, Wameeney, Kas., one ram \$50; to C. V. Criss, Belton, Mo., four ewes for \$80 and to J. Henry, Little Rock, Ark., one ram and one ewe for \$60.

The good sheep does not consume more food than a bad one, nor does it cost more to shear. The freight and charges on high class wool are not higher than those for poor fleeces. It is, therefore, the production of high-class wool which the flock-masters of the country should ever keep in view.

If a new association is to be formed in the interest of wool-growing in the United States, it is just as well to see from the start that it is under the management of wool-growers instead of manufacturers. The people have had enough of a wool-growers' association with which wool-growers are in no way connected.

The export of sheep from Canada is now assuming such large proportions that it bids fair to become one of the leading industries of the agriculturist. The numbers of sheep shipped to Europe during the past year were 75,905, worth about \$500,000, and to the United States 233,600, worth in round figures \$900,000, or altogether a trade of about \$1,400,000 per annum.

In the wool handled in Boston so far this year there has been an increase of ten per cent. in the volume of domestic fleece and a decrease of nearly twenty-five per cent. in foreign, as compared with the same part of 1882. With reduced import duties, how will these figures compare with those of the first quarter of 1882?

In Canada and England the raising of root crops is an essential part of sheep husbandry. Here it is not so. The reason for this is that we can raise corn, while the English and Canadians cannot. Corn fodder is an almost perfect food for sheep, although root crops, such as turnips, rutabagas, etc., can be used with success in countries where corn cannot be grown profitably.

A ram will usually get from 800 to 1,000 lambs during his brief lifetime. A good animal will eat no more than a poor one, but every one of his progeny as stock-getters and producers of mutton and wool will be worth a great deal more than the progeny of a poor one. If then, a farmer buys the latter and saves \$5 or \$20, how much profit will he make in two years by the operation?

English sheep breeders recommend salt for liver-rot in sheep. The *Mark Lane Express* says two methods of administering the salt present themselves: one of these is to give it with chaff or hay and straw, or other meat, in a trough; the other is to drench them with brine of a proper strength. Most men will be disposed to give the preference to the former mode of effecting the cure.

We once heard a successful Indiana sheep raiser say that it was his practice to go to Cincinnati in September and buy from the market Southdown ewes, or such as had Southdown marks, taking them to his farm and using them for breeding purposes. He turned ewes and lambs on rye, as soon as practicable, and kept them there. The lambs he sold in the middle of May, realizing a handsome profit.

A Vermont sheep raiser claims that foot-rot can be entirely eradicated from a flock of sheep by dipping the feet of every member of the flock, whether lame or not, into kerosene oil, and then putting a pinch of sulphur between the hoofs. One repetition of the treatment at the end of two weeks, he claims, will be sufficient. They should be kept in a dry place for a few hours after each application of the kerosene.

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YOUNG MEN. Now is the time to learn to furnish paving situations. For terms, address COMMERCIAL & M. TELEGRAPH OFFICE, Ann Arbor, Mich.

June 14, 1883.

COLMAN'S RURAL WORLD.

Horticultural.

Old-Time Farming in Pennsylvania.
CHAPTER VII OF R. S. ELLIOTT'S "NOTES TAKEN IN SIXTY YEARS," SOON TO BE PUBLISHED.

[CONCLUDED.]

EDITOR RURAL WORLD: The threshing machine, (which had been tried in Scotland before 1800) was coming into use in Central Pennsylvania more than fifty years ago, but in a modest way.

A drum or cylinder with spikes sticking out like quills upon the fretful reelcupine" (as Mr. Shakespeare has it,) revolving in a case also having spikes in it, was our first machine, in which a sheaf at a time could be fed. It was driven by horse power. The straw and chaff were flung out on the barn floor, and thrown out of the way by men with forks; and the winnowing was done in a fan-mill turned by hand. Whether "tramped, cut," or threshed by the machine, we were very careful in cleaning our wheat, as it was a matter of pride to have it weigh always upwards of 60 pounds to the measured bushel. When very young, I saw a primitive horse-power threshing "machine"—a conical shaped log from the largest tree to be had, with wooden pegs projecting from its surface; the small end held by a ring on a post in the middle of the floor, and a horse to the large end to pull it around on the grain. I think it was not patented, but while I could not point out the farm where I saw this rare machine, I can show the pretty little vale where the farm is situated. Another unpatented machine of those days was a revolving hay rake, invented by Mr. John Shaw, an intelligent gentleman in the neighborhood, but who, for some unknown reason, did not get a patent. It was constructed precisely as the first wooden revolving hay rakes, which came into use some years later, and which perhaps yielded some one a fortune, who may have seen Mr. Shaw's rake and got a patent on it.

Jethro Wood's cast-iron plows made their appearance in the Juniata valley, about the time I gave up school and went regularly to work on the farm; but our old-fashioned plow, with its iron share, edged with steel, its "coulters" of the same metal, and its wooden or cast-iron moldboard, was our great reliance, especially in rough ground or in sod. Thomas Jefferson, (a gentleman of some note 100 years ago, fated to be much spoken of for putting in shape the daily talk of the times as the Declaration of Independence, although he did much greater things, and who died synchronously with John Adams on the Fourth of July, about the time the engineers began to survey for our "canal") is said to have been the first to trace mathematically the curves which the moldboard of a plow ought to have. Perhaps he was, for he was a philosopher, and could even teach the stone-cutters at work on his pet, the University of Virginia, how to handle their tools and shape the material. But Arthur Long, who made plows in my native town, had a surer way of getting the curves, by noting where the moldboard clogged, or scoured, and modifying it accordingly, till perfection was attained. This was science, if science be, as said Prof. Swallow, the eminent and unrewarded geologist of Missouri, "the essence of human experience."

Often have I been amused of late years by discussions in agricultural papers on rotation of crops, the use of "plaster" as a fertilizer, the benefit of clover, and so on; all matters of course in my native county when I was a boy. We "rotated" as regularly as the seasons came round; we had our luxuriant fields of clover, and the estimation in which plaster (gypsum) was held is attested by the fact that it was brought up the Juniata river in keelboats pushed by poles, long before the canal was made. We farmed better sixty years ago than the people in some parts of that country do now, but there is no use in telling the concealed moderns this, as they will not believe it.

One old time custom of farm-life is happily for the youngsters, at least known no longer. Sole and upper leather, and tanned calf skin (the latter for the women's shoes) were provided, and the shoemaker came round once a year to make up our foot-gear. If he came late, woe to the boys. There was no help for us; but if the farm-boy nowadays should find his feet in the condition ours were sometimes in, as the cold weather got ahead of the shoemaker, the pseudo-philanthropists would howl over him—and he would perhaps howl, too. But we were used to it.

It is a modern belief that our farm-life was fearfully laborious, half a century ago. As we kept sheep for wool as well as mutton, and also grew flax for its fibre, and were not yet past the spinning wheel and hand loom period, woman's work was constant, and sometimes tolerably hard; but it was always cheerfully performed. It was also customary in Pennsylvania for the women folks to do the milking, as the Yankees had not yet set the example of the men "palling the keows." It would seem as if the old time women had a hard life; but women now give a great deal of time and labor to things unknown in the ancient and simpler days; and I think our old-time women enjoyed, perhaps, as much leisure as their rural sisters do now. The men did not regard farm-life as unduly toilsome. Among the boys it was a matter of ambition to turn a good furrow, and among the men to move neatly, and cradle skillfully, and, in short, to do all their work well. We had our aspirations in the line of duty, and the pride in our calling that sweetens labor.

We had our pleasures, too, all the sweeter for the usefulness of our lives. We went to "meeting" on Sundays and saw, and were seen. Each young buck was proud of his horse and the proudest of all was the one whose stirrup leathers were longest in proportion to the length of his legs, and who could ride a prancing steed with only the toe of his boot on the stirrup-iron—as proud as a fine lady at Saratoga with a long-tailed gown. In fall and winter the weekly singing schools, the merry sleighing par-

ties and other innocent recreations, were joyous enough to compensate for many days of toil. The "apple-butter boilings," when we met at farm houses, pared and cut apples, stirred the boiling material in the big copper kettle hung in the wide chimney, and played games—got chaste kisses from the pretty girls—what could unsophisticated and moral youth want more?

In November, 1833, turned of sixteen, (having from the age of 14 been edging into the pleasures of adolescence) I was at an apple-butter party, on the night of the great meteoric shower, when thousands of stars were apparently darting towards the earth and more following. We were all badly scared; the world that seemed so good and nice when possibly doomed—might be coming to an end for all we knew; some prayed and others, not in good practice, earnestly tried to. But with all our fright, and the final day of earth possibly dawnning, we still, with sublime presence of mind in the midst of appalling peril, stirred the big kettle and did not lose the apple-butter.

The display of "shooting stars" in 1833 was the most remarkable on record. The American Journal of Science gave an account of it, but it has never been accounted for. The meteors, the Journal says, "began to attract notice by their frequency as early as 9 o'clock, p.m., November 12, the exhibition being strikingly brilliant about 11 o'clock, but most splendid of all about 4 o'clock, and continued with little intermission till darkness merged into daylight. A few fireballs were seen even after the sun had risen. The entire extent of the exhibition is not known, but it covered nearly the whole surface of the earth's surface. Everywhere in the United States the first appearance was that of fire-works of the most imposing grandeur, covering the entire vault of heaven with myriads of fire-balls resembling sky rockets. On a more attentive inspection, the meteors exhibited three distinct varieties: the first consisting of phosphoric lines apparently described by a point; the second of large fireballs that at intervals darted along the sky, leaving numerous trails, which occasionally remained in view for a number of seconds, and in some cases for half an hour or more; the third of undefined luminous bodies which continued stationary for a long time. The meteors all seemed to emanate from one and the same point. They set out at different distances from this point, and proceeded with immense velocity."

Many more particulars are given in the Journal's account of the "shooting stars," but I have given enough to convey some idea of the wonderful spectacle which we rustics were fortunate enough to witness. No wonder we were scared. Nothing equal to it had ever been seen or heard of. We could not possibly know what it meant, and I do not know yet; but most, if not all of those who witnessed it when I did, at the lone farm-house by the side of the turnpike, where they now dig sand out of the ridge and carry it two miles on wire ropes to the railroad for the use of glass works in Pittsburgh, are gone from earth, and up to the stars, as I trust. But, I repeat, in the midst of what might have been "the wreck of matter and the crush of worlds," we saved the apple-butter, and I look back to the saving of that apple-butter as a brave achievement.

THE METEORIC SHOWER OF 1833.
November's evening, calm and clear,
No token given of peril near;
November's night, with brilliant sky—
Her stars and planets fixed on high—
Tells naught of changes coming on,
With strange and dread phenomenon,
And found, youth and smiling age
In sportive toil alert engage,
With nimble fingers deftly pare
The aromatic apples there;
And in the chimney's wide expanse
The bubbles in the kettle dance;
While turn about, as chance may fall,
We stir the butter, each and all.
The scene is joyous, bright and gay,
As lads and lasses join in play.

But lo! what dire portent appears
To chill our hearts with sudden fears—
To check life's current in the vein—
To paralyze the startled brain!
The stars, unfastened from on high,
Promiscuous fall from out the sky,
And fiery balls terrific roll
From zenith off to either pole.
Some wandering Sun in upper air
Seem shattered into pellets there;
Like incandescent hell they fall,
And doom'd is our terrestrial ball.

Oh fearful scene! In dire dismay
Some pray and others try to pray;
As if a jealous God we please to pray;
And some in trembling accents say—
Can this, can this be judgment day?
The tardy hours of fear and fright
Are on as slowly wanes the night;
And still the fearsome, fiery shower
New terror brings from hour to hour.
With myriad burning missiles hurl'd,
Lost! Lost! this unregenerate world!

At length, Oh joy! the night is past,
The fiery shower has fled at last.
With day light comes new courage, where
So late were terror and despair.
Like spirits only bold at night,
The vagrant stars all shun the light;
They are the reg'lar swallows of the night;
With radiance, however, the day illumines—
Into my mortal breast has drawn
The meteors all that fled at dawn.

Value of Bees in Orchards.
As bees carry on their bodies the pollen or fertilizing substance, they aid most powerfully in the impregnation of plants, while prying into the blossoms in search of honey or bee-dew. In genial seasons, fruit will often set abundantly, even if no bees are kept in its vicinity; but many springs are so unpropitious, that often during the critical period of blossoming, the sun shines for only a few hours, so that those only can expect a remunerating crop whose trees are all murmuring with the pleasant hum of bees.

A large fruit grower told me that his cherries were a very uncertain crop, a cold northeast storm frequently prevailing when they were in blossom. He had noticed that if the sun shone only for a couple of hours, the bees secured him a crop.

If the horticulturists who regard the bee as an enemy could exterminate the race, they would act with as little wisdom as those who attempt to banish from their inhospitable premises every insectivorous bird, which helps itself to a small part of the abundance it has aided in producing. By making judicious efforts early in the spring to entrap the mother-wasps and hornets, which alone survive the winter, an effectual blow may be struck at some of the worst pests of the orchard and garden.

The Rawles' Jennette.

COL. N. J. COLMAN: I see in the RURAL WORLD of the 3rd inst., a sketch of the Rawles' Jennette apple, taken from an Ohio paper, and have seen other statements claiming different origin for it, and as they disagree from the tradition given us by our fathers, I feel disposed to make that tradition public through the RURAL WORLD, that the people may be their own judges on the subject.

The tradition says, "Many years ago, in Fluviana county, in the State of Virginia, near the town of Columbia, where the Rivanna river empties into the James, there stood an apple tree which bore fruit that hung on and remained hard so long that but little attention was paid to it. In course of time, a Mr. Rawle gathered some of them and put them up for trial, and found their value." Columbia was then called Point of Fork. It is supposed that Rawle named it after some favorite female, as Jennette at that time was a popular name. We have no definite title given in the tradition, but think the name likely was given before Minister Genet came to the United States. He was here only a short time, was called back in 1793 by request of this government for trying to raise recruits for Napoleon Bonaparte's army.

As for Dr. Franklin having any hand in it, I am inclined to doubt, as he was so much engaged in his philosophy and politics.

Caleb Rawles resided in Amherst county, as Mr. Black says, some seventy or eighty miles west of Columbia, and I never heard of him being the man before, though I was raised in Nelson, between Amherst and Fluviana, and frequently heard of him, but never saw him.

I believe that all of the old catalogues of the nurserymen spelled the name Janette. I now have Minor's catalogue of Tennessee, published over forty years ago, and they spell the name Janette or Janett.

SEVENTY-FOUR,
Paynesville, Mo., May 30, 1883.

Locality for Orchards.

COL. COLMAN: In view of the recommendation of Patrick Barry, concerning experimental orchards for nurserymen, in order to familiarize themselves with the various fruits as well as varieties, insist upon the practice by every nurseryman who expects to sell fruit trees outside of his immediate neighborhood to let such varieties as are adapted to certain sections be recommended, and those not so adapted be promptly destroyed—nothing will injure a nurseryman more than for the little present gain to hazard his reputation and future prospects of business.

Let also, with an order, be asked the kind and quality of soil, exposure, etc., and then, if any selection be allowed to the seller let him be conscientious in selecting only what is best suited to the conditions.

Again, while there are unscrupulous tree-agents, make it known that agents are a necessity and a blessing because they introduce nursery-stock, viz: fruit and ornamental trees in localities where, but for these same agents, they would not be thought of or purchased for a generation. Let no known sharper or bummer, no matter how much business he may bring, be furnished with credentials and other outfit by any respectable firm.

There is a firm doing business at Rochester, New York, who will carry a credit of five cents for a year or two, and pay it on the next order—a practice to be commended and followed as a good example, and the firm will make promptly good any unintentional fault or oversight on their part; hence this firm is prosperously and happy as they deserve to be—he that is faithful in small things will also act likewise in large matters.

Recommend and insist that it is the duty of all Agricultural Colleges and experimental stations, to thoroughly test varieties of fruit, and at the earliest possible moment give out any well ascertained facts, pro bono publico. For this purpose were they established and supported.

I trust these thoughts will open the subject which will flow in a steady stream, as you meditate upon them.

C. W. M.

The Wilson has Come to Stay.

ED. RURAL WORLD: In reply to Mr. Samuel Miller who wishes to know why the Wilson Strawberry is still considered to be the leading variety, I think Mr. M. has overdrawn—unconsciously perhaps—his picture of the Wilson, and it is not such "miserable trash" as he would make us believe. As marketed here there are many who relish it, and I have even heard it preferred to the Downing. With us, in South Jersey, the Wilson is a strong grower, and more certain to yield than any other variety a large marketable crop of firm berries. I have had several growers tell me this, this season, and most of these men have from 12 to 20 different varieties fruiting this season. They also have stated they see no signs of its running out. Mr. Henry Campbell, of Freehold, N. J., received a premium of \$30 last season, from the New Jersey State Agricultural Society for the best acre of strawberries, he having raised 3704 quarts of Wilson strawberries, which sold for upwards of \$70.

Of the other varieties we are certain to hear that they are "too soft," "have green tips," "leaf blights," "sets too much fruit," "need high culture," ad infinitum; while no higher commendation can be given to a new variety than to compare it in firmness, color, &c., to the Wilson. In fact the Wilson has more good qualities to recommend it than any other well-known strawberry, and I am not surprised to find the growers in convention making this fact known, and I think that any horticultural society which is run by fruit growers, and not by men who have plants of new varieties to sell, would testify to the same. The Wilson has come to stay; at least it will be the leading one for years to come. The only new variety which shows any signs of becoming a competitor for public favor is the Jas. Vick, and its merits are yet to be proved. The Manchester

will have hard work to convince growers that it ought to supersede the Crescent, and it will never fill the place now occupied by the Wilson. I think no pistilate variety will do this.

RUFUS W. SMITH.
Elmer, N. J., May 31, 1883.

Fruit-Preserving Houses.

When a crop of any kind is shown to be profitable everybody wants to grow it. Some years ago the Bartlett pear brought highly remunerative prices in our markets, but in good seasons the crop is so heavy that prices rule low. To guard against losses from this condition of things many fruit growers adopt methods, which are more or less successful, of keeping their produce until prices are better. The Country Gentleman describes a fruit house belonging to Mr. Shearer of Tuckerton, Pennsylvania. This house is fifty feet square. It has two stone walls, each twenty-two inches thick, with one foot of space between them, and that is filled in with charcoal. Under the floor is space enough to put four feet of ice; at the sides four feet of ice is also piled, kept in place and concealed by studding and boards, and above the room and under the roof the ice is eleven feet thick, and on the top of this about three inches of coarse wool. There is, therefore, ice on every side, a veritable refrigerator, capable of holding three thousand bushels of fruit. It is filled with ice once a year, and takes about 1,200 tons. In this house the temperature varies from thirty-three degrees to thirty-seven degrees. There are no windows and only one entrance. Apples are kept till April, and sold at intervals till July. Pears are stored while hard and green, and they are kept until wanted. The losses by rotting are very light. The apples are stored in tight wooden boxes holding about three bushels each, and these piled on each other, so that air is excluded from all except the upper one, and that is closely covered. No provision is made for ventilation.

Horticultural Notes.

Small fruits are not yet exported in a fresh condition, but it is thought that grapes can be profitably raised for export.

It is said that saturating the bag containing seed beans with coal oil exterminates the bean weevil, but does not harm the beans in the least. Probably the same treatment would serve with infested peas.

Stained berry boxes may be whitened by submitting them, in close confinement, to the fumes of burning sulphur. They should be first moistened. Those having a dry-house will find that a suitable place for bleaching.

Southern farmers in many localities are turning their attention to market gardening. The South Carolina Truck-Farmer's Association has been organized by seventy Grangers in Barnwell county in that state. It is intended to promote the raising of fruit and vegetables in that section, and afford co-operation in their sale. Already the county has over 5,000 acres of land planted with potatoes, melons and vegetables which Southerners call "truck," intended for shipment to Northern markets.

To have green corn for boiling or roasting during the season, after it first comes on, there should be an interval of about ten or twelve days between the time of first and second planting, and as the weather grows warmer, the interval should be shorter, if the same variety is planted through the season. The large evergreen corn requires a longer time to grow, and should be planted at about the time of the third planting of the smaller kinds. It will then be fit to pick about ten days after the other.

In Georgia, where watermelon culture is made a specialty, it is the general practice to turn the vines back, even when two to four feet long, to plow the land out. This is believed to be no injury at all if carefully done, without twisting or breaking. The idea seems to be to literally turn the vines back, and not to pull them to one side; and after the plowing is done carefully replace the vines in their original position. One prominent grower has removed vines with melons a foot long on them, and found no permanent ill effects.

If the young seedling or cutting of any softwooded plant is to be bushy it must have its tip nipped out by the thumb nail or pruning scissors at a very early stage, and this stopping must be repeated frequently. If this is called a well-furnished plant is required, an average of from two to three inches is all the extension that must be permitted before the top is nipped out, and this must be continued until the desired size is attained. Then generally the plant is allowed to grow till bloom or blooming sheets are developed.

J. J. Thomas advises, as a light, graceful, but effectual screen, a barrier of shrubs interwoven with barbed wire. He says: "There are a few dense shrubs which have a natural hedge growth and require but little cutting back, such as the purple barberry, the sweet briar, the privet or the buckthorn. Hedges made of these, strengthened with three or four galvanized barb-wires stretched at different heights through their interior, would not permit any animal to pass. They would appear light and graceful at a distance, but be found impregnable on a near approach. The barb-wires are to be stretched successively one above the other as the screen is growing, and when well encased within and held by the branches they will be firm and secure."

South Carolina, Georgia, and Florida have taken the lead in the truck-farming industry, but it is rapidly extending throughout the south. The Mobile & Ohio railroad received \$300,000 for transporting vegetables alone last season, and the profit of the business south in general must be extremely large. It is likely the growth of the business, which, with good management, is practically limitless, will bring hither a thrifty class of immigrants, whose individual prosperity must greatly enhance the welfare of the entire south. The Savannah, Florida & Western system of roads, the Central and the ocean steamship lines, offer unequalled facilities for the growth of the industry in this section, and we look to see it assume remarkable proportions in the near future.—Savannah Morning News.

People who desire to preserve their health should be exceedingly careful about their diet at this season, and at no time should they be without a supply of Perry Davis' Pain Killer, the safest, surest, and speediest remedy for all troubles. All druggists sell it.

DARBY'S Prophylactic Fluid.

For the prevention and treatment of Diphteria, Scarlet Fever, Small Pox, Yellow Fever, Malaria, etc.

The free use of the Fluid will do more to arrest and cure these diseases than any known preparation.

DARBY'S PROPHYLACTIC FLUID,

A safeguard against all pestilence, infection and epidemic.

Also, as a Gargle for the Throat. As Wash for the Person; and as a Disinfectant for the House.

A CERTAIN REMEDY AGAINST ALL CONTAGIOUS DISEASE

COLMAN'S RURAL WORLD.

THIRTY-SIXTH YEAR.

BY NORMAN J. COLMAN.

PUBLISHED WEEKLY AT

ONE DOLLAR PER YEAR.

ADVERTISING: 25 cents per line of space; reduction on large or long time advertisements.

Address: NORMAN J. COLMAN, Publisher,

600 Olive Street, St. Louis, Mo.

(Advertisers will find the RURAL WORLD one of the best advertising mediums of its class in the country. This is the uniform testimony of all who have given it a trial. Many of our largest advertising patrons have used it for more than a quarter of a century, which is the highest possible recommendation of its value as an advertising medium.)

READERS of the RURAL WORLD, writing to or calling upon any one advertising in our columns, will do us a favor if they will say they saw the advertisement in this paper.

THE weather is still showery, and though warmer the nights are quite cool.

OUR belligerent sheep men are taking a rest, but the contest is as far from being settled as ever.

ARRANGEMENTS for the fall fairs will soon be completed, and we shall be glad if the secretaries will notify us.

FARMERS in Indiana owning self-binding reapers are suffering from incendiaries, and quite a number of barns have been burned within a recent period. Vandalism is not confined to Ireland.

THE receipt of new apples, as witnessed in the St. Louis markets, indicate an inferior crop, the fruit being small and rather knotty. Good old apples continue to come and find ready sale at good prices.

THE sales of the Kentucky Shorthorns at Chicago on the 27th June and the two following days, bid fair to be the most important of the season. The Bates stock are on trial, but will show up one of the best lots of individuals ever offered in America, we believe.

THE people of England and her colonies are thrifty, enterprising and calculating, hence where a dollar can be saved they save it, or made and they make it. Small as Canada is, there are said to be 400 cheese factories in the province of Quebec.

THE steady rain, cloudy, damp weather of the past week, commission men inform us, ruined the peach market, most of the receipts selling for a mere trifle. Peaches decayed so rapidly that buyers were afraid to take hold, while the shipments into the country in almost every instance resulted in a loss to the shipper. Prices here have been discouragingly low so far this season.

THE speculators and manipulators of grain etc., are confused and bewildered at the various conflicting reports concerning the coming crops. The favorable growing weather prevalent everywhere the past few weeks points to larger crops, and the figures regarded reliable a month ago are now considered worthless. Hence the uneasiness of operators. The market is very unsettled.

AT all public gatherings of note, the proceedings ought to be taken down by a shorthand reporter and afterwards given to the public. The best matured thoughts of the best thinkers of the day are often lost, even to those who hear them, whilst the great world at large knows nothing of them. These thoughts are suggested by the absence of anything but the merest outline of the proceedings of the shorthorn breeders and wool growers of Indiana last week in our exchanges.

ST. LOUIS COUNTY is already bringing new potatoes to the St. Louis market. Several Arkansas and Tennessee cultivators have not made an appearance yet in any of the markets, and will be surprised to learn that the producers 300 miles further north are ahead of them. After this vicinity gets fairly started prices rapidly decline, and the outlook for the southern shippers becomes correspondingly discouraging. Old potatoes of good quality are still in the market, the cool weather keeping them very presentable.

THE Shorthorn breeders of Indiana held their annual meeting at Indianapolis last week and it proved very interesting. Quite a number of well-written papers were read, evincing a thorough knowledge of the subject in hand and calculated to establish the young in the faith, and to give a reason for the hope that was in them. It may be early to do so, but we, nevertheless, suggest that the next meeting of the Missouri association might safely imitate the example thus set, and both do and say something worthy of note and calculated to bring this great industry to the front, as it has never been heretofore.

THE New York Legislature has before it a measure for the encouragement of tree planting which the Legislatures of other States will do wisely to copy. It provides that whenever any of the improved lands within the State shall be

replanted, and shall have growing there on six hundred forest trees to the acre, planted as nearly as practicable at equal distances from one another, such lands shall be exempt from taxation so long as they remain forest lands. This is a practical way of encouraging forest culture which cannot fail to be effective, and the ultimate advantage to the State will many times overbalance the amount of the taxes remitted.

THE meeting of the American Association of Nurserymen, Florists and Seedsmen, promises to be the largest one yet held by the Society. Letters from all parts of the United States have been received by the President advising him of the coming of a large number of delegates.

The arrangements in St. Louis for the entertainment of the visitors are such, we hope, as to please them. On the second day of the meeting, (June 21st) the members will visit Shaw's garden in a body, and the busts of Linnaeus, Dr. Asa Gray and Thomas Nutall, the eminent botanist, will be unveiled, and appropriate addresses delivered on the occasion. On the third day of the meeting, (Friday afternoon) the entire party with a number of St. Louisans will take an excursion on the steamer Chas. P. Chouteau, on which a lunch will be spread. The steamer will go down the river about twenty-five miles and return in time for members to depart on the evening trains for their homes. Final word has not yet been received as to the excursion to the Rocky Mountains—though it is probable it will be taken. The mayor of the city has been invited to deliver an address to the body on the part of the city, and the governor of the State has been invited to deliver an address of welcome on the part of the State. The regular programme of proceedings was published in our issue of May 17th.

QUIET a controversy is going on in some parts of Missouri involving the question—"Does it pay better to send our wool East for sale or sell it to local dealers and buyers at home?" The RURAL WORLD suggests an easy answer to the question—do neither. Start your own woolen mills at home and there manufacture your own clothes. Save all commissions, all expenses of middlemen, all transportation expenses, all delays in getting returns, all manufacturer's profits east, all the jobber's profits on the goods there, all costs of transportation back to Missouri when in the form of cloths, and besides, build up your own towns, develop your own resources and those of the State with your own capital. We hail with satisfaction the rebuilding and reopening of the mill of McCay & McAfee, at Independence, since its destruction by fire in October last. Speaking of the opening, the *Sentinel* says:

"It is a splendid building, 93x42 feet, three stories high, with each story twelve feet clear in the ceiling, windows let in floods of light and also serve as needed ventilators. The machinery is of the newest and most improved style and is as near perfect as it can well be. There are two sets of cards, two 'mules,' of 300 spindles each, and the capacity of the mill is 500 pounds of yarn per day. For the present only yarn will be made, as the weaving machines are not yet ready."

CHAMPION HAY RICKER.

This machine, advertised in another column, has been in use now for five years, and during that time has been sold to over 20 States and territories, from Alabama to California. There are now from seven to ten thousand in use; not one was ever returned. From 20 to 30 acres can be ricketed with two rakes in one day, the work be better done and at one-third the cost by the old way. The manufacturers claim that they are the only machines that have ever been or are now upon the market that take the hay clean from the swath, and without manual labor leave it ready for the stacker on the rick; that the hay when thus deposited on the rick is left in the center thereof in such a shape that the builder can properly dispose of it with more ease than by any other method now in use. In the use of this machinery higher and better ricks can be built, and the hay preserved better than when put up in the usual way. The machines may now be had by ordering direct of the manufacturers and be on hand in time for haying. See the ad. for further particulars and prices.

WORTH IMITATING.

While cotton mills, oil mills, and iron furnaces yield a handsome profit in the south, yet it requires a large capital to construct and operate them, and it is only here and there that one can be started; but there is no such limit to many smaller industries that need comparatively little capital. Arkansas has thousands of openings for these smaller industries of various kinds that will pay well—not that the aggregated profits will foot up as much at the end of the year as the larger ones, but that the per cent made on the capital invested will be greater. It has been demonstrated beyond a doubt that our genial climate, fertile soil, and geographical location, give us an advantage as a fruit and vegetable producing section not to be excelled. Last week, while on a visit to the thriving town of Beebe, located in the south end of White Co., and in the midst of a most excellent fruit section, I came across a cannery factory just commencing operation. This factory is turning out a most

excellent class of goods, and has a capacity of 1,500 2-pound cans per day. It is incorporated under the laws of this State, and operated by a Joint Stock Co. It draws its labor from the town, and expends \$30 to \$40 daily for this purpose that would otherwise be lost. The company employs mostly girls and young ladies, superintended by older women. It was forcibly struck with the neatness of dress, the intelligent expression, the rosy cheeks, and the splendid physique of these misses, indicating the healthiness of the place. There is an abundance of fruits of all kinds grown around Beebe, therefore this factory will secure its raw material fresh, and in good condition, and at prices that would look ridiculous to our city packers. There are many places in Arkansas that might imitate the more enterprising people of Beebe with advantage to themselves.

GEORGE P. MURRELL,
Austin, Ark., June 4th, '83.

AWAKENING.

Very generally, and we think very surely, are the people of Missouri awakening to the necessity of paying more attention to the capabilities of their great State as to manufacturing industries. Truly no State in the union is possessed of more or better advantages. The following from the *Jackson Cash Book* published at the county seat of Cape Girardeau County is an illustration that might be duplicated by almost every county in the State:

"We believe there is a good opening in Jackson for a creamery, and think it would pay some man to come here and establish one. Everything that is necessary for such a business is here. The country is full of cows, and good pastures for them to range over spread out all around us. The amount of butter and cheese that is eaten in Jackson alone would do credit to any other town of twice the number of stomachs. The amount of fresh butter and good cheese that would be needed to supply the town would go far toward making the business a profitable one; and besides the shipping facilities would be pretty good. Two beautiful creeks (if they would be of any use) skirt the town on either side, east and west, and besides these, there are splendid springs in and all around the town. Surely this is just the place for a creamery. Jackson is beautifully situated, and is composed of about eight hundred souls. It is as healthy as any spot in the whole country, and is in the heart of one of the finest farming sections. The town needs a creamery and all such things. But when our railroad comes, then will come these things also."

SUCCESSFUL WHEAT FARMING.

COL. COLMAN: Be good enough to insert the accompanying in your next issue, the concluding argument on the proper method of successful wheat farming:

In a former article I spoke of the necessity of good, strong, well-rested and well-matured land for the purpose of raising a good crop of wheat. I now call the attention of your readers to a second and third cause of this year's and many previous failures in wheat raising, to wit: the selection of the seed. It is a scientific as well as practical fact that wheat for seed should be *fully ripe*, and it is equally well established that wheat for the mill and flour should be harvested several days before it is fully ripe. The reason why this is so, I will not here state, because I am not dealing with scientific theories and demonstrations, but only with naked and practical facts. I do not believe that one farmer in fifty pays any attention to this very important factor in wheat raising. He knows that when he cuts his wheat tolerably green, he gets a better price than when he cuts it ripe or over ripe, and that is the end of it with the great majority. That this unripe seed sown from year to year on the same ground finally deteriorates and produces cheat, worms, flies, bugs and other nameless insects, never enters his mind; that he himself is the sole cause of all these evils, he never—well, hardly ever—admits. Theoretically as well as practical farmers, and political economists write and talk about these facts, and have done so in all former times and past ages, but all to no purpose; with the satisfaction only of having done their duty. So well is this fact established, that the agricultural department sends men having practical knowledge of these facts, to the best wheat raisers in the country, who buy the wheat in the field, letting it ripen perfectly, and then harvest it, send it to Washington by the car load, and then pack it in gallon packages and send it through the Congressmen and others, as well as their correspondents, throughout the country to what they suppose to be practical farmers for trials and experiments.

A third cause, although of minor importance, but still a cause of failure, is the failure to change seed, from timber to prairie land, and vice versa, or any other change. Our best changes come from Kentucky or Tennessee wheat. My friend, Col. Sparks, of Murphreesboro, Tennessee, is largely engaged in raising new and improved varieties of wheat, some of which he sells to the Agricultural Department, but will sell to any body that will call on him, so far as he is able, and I would like to say to your farmers, readers, if they prefer wheat to cheat, and wheat tojinks, that they had better in time apply to him, as well as other southern wheat raisers, and there procure their seed, which ought to be done at least once every five years. Not a kernel of this year's wheat ought to be sown in this country. Let the cure be a radical one.

The best way for our wheat raisers to acquire new, fresh and good seed would be to call a meeting on Saturday, the 16th day of June, to meet at the Court House, Belleville, for the purpose of selecting one of their number or other agent and send him south to Kentucky and Tennessee, to buy as many car loads as they need for seeding their grounds.

Having my pen in hand, I make this call for that purpose. The material benefits derived therefrom would be beyond reasonable calculations.

Very respectfully,
G. C. EISENMEYER.

P. S. As this is a matter in which all the people are interested it would be desirable for all the county papers to publish this meeting.

MASCOUTAH, Ill., June 5th, 1883.

FRUIT AND VEGETABLE CANNING.

The wonderful increase in the business of putting up fruits, vegetables, etc., in cans, whereby supplies of these useful articles are afforded to the masses at reasonable prices the year round, affords a pleasing indication of the progress of civilization and division of labor. Take the article of tomatoes, for example. No less than 2,160,123 cases of 24 cans each, or 52,322,532 cans, were packed in the United States in 1882, or nearly one-third more than in any previous year. A single can of good tomatoes is now obtainable at 10 cents, against 40 and 50 cents fifteen or twenty years ago.

Within the past dozen years the number of establishments engaged in this industry has more than quadrupled, and the value of yearly products has more than trebled. In 1870 ninety-seven houses were reported in the business; in 1880 the number had increased to 411. In the former year the value of the products was \$5,400,000; in the latter it amounted to \$17,600,000. The details, if given, would show a corresponding increase in the number of articles canned.

Formerly but a comparatively few things were preserved in this way. Now, about every kind of fruit, vegetable, meat, and fish is put up for use in any season or any place. Great as the growth of this industry has been in the past ten years, it is likely to be greater in the coming decade. It is, indeed, likely to become a great American industry, but there is room for invention to displace the tin cans, at least for fruits or vegetables that have acid juices.

The corn canning business is assuming still greater proportions in Maine. This season the Portland Company will operate nine factories, and the Winslow Company fourteen. The Home Farm says the acreage now contracted for by this company ranges from one hundred and seventy to three hundred acres to a factory. At the Fairfield factory three hundred acres have already been signed for, and at the Canton factory two hundred and thirty-five acres. Burnham and Morrill will operate seven factories the coming season. The smaller factories and companies in the State are preparing for an active season. The prices to be paid by the leading companies are as follows: Burnham and Morrill, and the Winslow Packing Company 3 1/4 cents per can of twenty-six ounces; Portland Packing Company, 3 cents for twenty-six ounces. In this connection the following is in point:

The daughter of a deceased Boston man, once wealthy but reduced in circumstances, undertook the manufacture of pickles and preserves for self-support. Her friends were first customers, and now her business is very extensive and nets an income of \$10,000 a year. This is a good deal better than living on one's relatives and becoming soured yourself.

These particulars, gathered from many sources, evidence the magnitude of a growing and profitable industry that might and ought to exist in every populous community, and be made to add to the health, wealth and prosperity of our people. As we have said before, this is an enterprise that needs to be confined to no one state, nor has any a monopoly of the business. It can be as successfully prosecuted in Missouri as in Maine or Maryland.

The Cattle Yard.

Flock and Herd Notes.

PERRY & MILLER, of Madison, Monroe Co., Mo., are stocking their large farm with sheep and will buy some 400 or 500 head.

JUDGE JONES, of Liberty, sold some 40-odd fat steers last week that averaged about 1450 pounds.

C. W. RASH of Paris, Mo., sold a high grade steer calf 10 months and 13 days old to M. D. Blaskey that weighed 825 lbs.—*Moore Co. Ex.*

A very large drove of fat cattle is coming in from the southwest, says the Carroll, Mo., *Record*, which will doubtless still further depress the prices of cattle.

From the best information we can gather there has been at least 100,000 pounds of wool bought in Paris this spring. The price has ranged from 18 to 24 cents per lb.

Mr. SMITH, at his fine dairy five miles northwest of Des Moines, has Jersey, Shorthorn and common cows. He says the best milk and butter cows he has are the Shorthorns. He wants to sell his Jersey—*Register*.

E. T. WETMORE returned from Chicago on Wednesday, where he took 110 head of fat cattle, that averaged 1,429 lbs in Chicago. He also took 124 head of hogs. He reports the market rather dull at present—*Paris, Mo., Ex.*

P. S. ALFRED, of Paris, Mo., shipped express this week to Mr. W. M. HOFFMAN, Coffeyville, Kansas, a fine two-year Cotswold buck, and one to C. N. SHELTON, Pulaski county, this state. He sold them for \$25 each. He also shipped 117 head of fat cattle to St. Louis, Tuesday, of this week.

FRANK SMITH cow \$41.
STANTON FIELD horse \$50.
S. M. PIPE horse \$92.50.
CY FRAKES mare \$111.
BUGGY and harness \$65.—*Liberty Tribune*.

KENTUCKY SALES OF SHORTHORN CATTLE, DEXTER PARK, CHICAGO.

We have heretofore made reference to these important sales, but now give a more detailed statement of the offerings. The sales will come off on Wednesday, Thursday and Friday, 27th, 28th and 29th June instant in the order named below.

We expect to be able next week to announce half-fares over all railroads to Chicago for those who wish to attend.

MRS. HAMILTON of "Flat Creek" near Mt. Sterling, Ky., will sell 50 choice animals from their herd, being chiefly "the get" of imported Grand Duke of Geneva (28756), and the pure Bates Barrington bulls, Barrington Duke 37623, Barrington Duke 2d 37624, and Barrington Duke 3d 37624; from dams of families of world-wide reputation and sired by bulls

the equals in breeding and merit of any in England or America.

Included will be 2 two-year old Red Bates Barrington Heifers (excellent as individuals and probably the best in breeding that have been offered in any sale in any country since the memorable sale of the Vinewood Herd in 1878), 2 Kirklevingtons, 2 Places, 4 Constances, 4 Knightleys, 4 elegantly bred Alexander Miss Wilseys, 2 Filigrees, 2 Rose of Sharons (of the best breeding and grand individuals), 2 Victorias; 25 head of "Flat Creek," Young Marys, Phyllises and Josepheines (topped by Duke and the purest Bates). Imported Grand Duke of Geneva (28756) Bates Duchess Family and illustrated in vol. 19, page 143 of English Herd Book—got by the celebrated Grand Duke 15th (21852), from the 7th Duchess of Geneva by the pure exported 3d Lord Oxford (22800), and thence to "the great" Imp. Duchess of Geneva in 1853, and whose 14 descendants in one breeder's possession, just 20 years later brought the unprecedented sum of \$262,400.00. The Three Barrington Dukes are all from the pure Bates Cow Imported Lally 8th, by the pure 7th Duke of York, (17754) out of Lally 3d, by the pure 4th Duke of Oxford (11387) Barrington Duke was sired by the pure unequalled Duke 14th of Thordale (28459), (the highest-priced bull ever sold in America)—Barrington Duke 2d by the pure exported 8th Duke of Geneva (28390), that was reimposed to America at a cost of over \$10,000 for use in the celebrated Vinewood Herd—and Barrington Duke 3d by the pure Barrington Duke 37622. For Catalogues of this sale apply to A. L. Hamilton, Lexington, Ky.

SENATOR JOHN S. WILLIAMS and A. W. HAMILTON, of Longwood, Mt. Sterling, Ky., will sell about 50 head of extra Bates bred Kirklevingtons, Places and Crags, nine high Bates and Duke topped representatives of the renowned Renick Rose of Sharon family, and a number of the celebrated "Flat Creek" and Vanner bred Young Marys and Phyllises. There will be included in this sale about fifteen yearling and two-year-old bulls of the above families (most of which are ready for service) of extra breeding, and which as to individual merit, will stand a comparison with any. Over one-half of the bulls are sired by Geneva Wild Eyes 3637 R. (acknowledged by the majority of breeders everywhere

June 14, 1883.

COLMAN'S RURAL WORLD.

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majority however, poor; Wilsons very poor, Crescents good. Tomatoes will be late, consequent on the cool weather. Clover is looking well.—John Griffith.

Season late, wet, until very lately, cold and wet, prospect for farm crops fair. Strawberries, Bidwell and Manchester especially, Concord and other hardy grapes on trellis all winter promise well; other fruit crops moderate or light. Not much damage to trees and plants by last winter's severe cold, and very little harm so far from late spring frosts. Good butter retails at only 15¢, cheese at 16¢ per lb.—F. K. P., Delavan, Wis., June 6th, 1883.

—Old Nodaway is going to lose her laurels if it keeps raining much longer. Small grain and grass is excellent. Corn is not good. Some have planted twice and have no stand yet. The best is small and weedy, and only three weeks later than usual. No plowing has been done for two weeks and it is still raining. The usual amount of cane has been planted but it is small and weedy. I will run an outfit made by Folger, Wilde & Co., which I think is the "Boss."—Joe D. S., Valentine, Mo.

—MO. FISH COMMISSION.—Dear Sir: We have an ample supply of young German Carp, now a few weeks old, ready for distribution. We desire all parties in your county who have ponds, lakes, or streams to apply to Geo. Eckardt, Forest Park, St. Louis. No charges except for expressage and cost of can, which must be retained. Carp ponds must be free from all other fish. Shipments will be made as the weather permits. Very young carp can be shipped with more safety than older ones, and thrive better when placed in ponds and streams.—Geo. Eckardt, Supt. Mo. Fish Commission. J. G. W. Steedman, Chairman, St. Louis, Mo., June 11th, 1883.

—In sending his subscription for the RURAL WORLD as "A Young Farmer" indulges in some pleasant criticisms respecting the writers to the Home Circle department. Wishes more Pig Pen information, and to know if possible the future of the hog market. We are always pleased with such friendly criticism as it gives evidence of the interest taken in the several departments of the paper. But we are unable to predict the future of the market. We prefer to fit our hogs for the stock yards as early as we can economically do so and then if the price is good to realize at once. With an abundance of good pasture and very little corn, stock of all kinds will now soon be fat. Our market reports are very carefully made up, thoroughly revised every week and entirely reliable.

—I am no preacher (am sorry to say) or son of a preacher (am glad of it), but I sometimes think there are few persons in whom morals are so highly developed—shame—but sometimes, owing to ignorance I suppose, I read things that make me inclined to be skeptical. Although I know it is wrong to disbelieve anything that is printed, I would like to inquire if you are acquainted with the party who wrote that letter in the RURAL WORLD of May 31st, from Mathew, Miss., about Southern Fruit prospects. How is he for truth and veracity? What I like most is the truth, the whole truth, and lots of it. He said, "Dr. J. M. Herd had a wine vault and a dozen different kinds of wine, and he tested and sampled them." And after he came out of the vault he saw a half-dozen steaks cooks with their large brood of young chickens, playing mother for them, and taking a deep interest, and manifesting a mother's care. Now, if the writer had signed his name as soon as the wines were tasted, it would not strain me to believe it, but to add that old mother rooster's story it smacks like a deep laid scheme to impose on the public a woman's rights lecture. Then the idea of a man sampling twelve kinds of wine and then tell him from a rooster! He couldn't tell a hen and chickens from a sow and pigs. I know human nature is the same in Mississippi that it is in Illinois, in a rooster.—Yours respectfully, H. M. K., Irvin, Ills. Oh yes, we are very well acquainted with the writer, a level-headed, sober fellow, who, when travelling, sees all there is to be seen, and learns all to be learned, making notes thereof for the RURAL WORLD. We submitted the letter above to him and he re-assertives the "Rooster" story and says they were a very motherly lot of old cocks, doing their duty admirably. What is there strange about it anyhow, brother K?

The Stewart Healing Powder Co.

This company originally of Jacksonville, Ills., have reorganized under the laws of the State of Missouri and opened an office at 418 North Second street, St. Louis, with F. G. Stewart President, E. P. Kirby Vice-President and W. E. Scott Secretary and Treasurer. Their healing powder appears to be very popular, all the leading wholesale saddlemen and druggists keeping it for sale and testifying that so far as they know, it has given entire satisfaction.

Double Daily Lines.

Luxurious Palace Sleeping and Drawing Room Coaches are being run from St. Louis to New York without change, in thirty-seven hours, by the Ohio and Mississippi Ry. Leaving St. Louis daily at 8 A. M. to New York, without change, by the Baltimore and Ohio R. R., arriving in New York next evening. Leave St. Louis daily at 7 P. M., to New York without change, over the Erie Ry., arriving in New York second morning. No other route makes quicker time. The Palace Coaches in use on these routes are the best in the world. Scenery on these routes is the finest in the United States. Passengers from St. Louis will find these routes the very best, as accommodations are superior and the comforts unequalled. Ask the Ticket Agent about this matter and he will gladly give you full information.

Obligation.

WAERAS: It has pleased the Great Master of the universe, in His infinite wisdom, to remove from our midst, our much esteemed and worthy brother David F. Zimmerman, who departed this life May 23rd, 1883, being at the time of his death about 57 years old. Bro. Zimmerman was a charter member of Gilroy Grange No. 236 (Cooper Co., Mo.) which was organized May 8th, 1873. Therefore,

Resolved, That this Grange has lost, in the death of Bro. Zimmerman, one of its most estimable and worthy members, the family a true and devoted husband and father, the community a respected citizen, and the church a zealous Christian.

Resolved, That while we bow in humble submission to "Him who doeth all things well," we tender our heartfelt sympathy and condolence to the bereaved family in this their sad hour of affliction.

Resolved, That a copy of these resolutions be spread upon the minutes of this grange, a copy be sent to the bereaved family, and a copy be sent to the RURAL WORLD for publication.

Resolved, That the members of this grange wear the usual badge of mourning for 30 days.

S. H. HUFFMAN, L. M. CORDRY, J. C. GREEN STEELE.

The Horseman.

My Colt.

I am now talking to a great number who own colts, and are dreaming just such dreams, and are questioning anxiously: What shall I do with my colt?

Now, I propose to talk about the colt in a gossipy, and perhaps, in a little irregular way, but to talk about him.

In the first place, what do you want to do with him?

Make a fast horse out of him, of course.

Of course. Just the answer I expected. And that is just what I want to do with mine, and what almost every man wants to do with his.

Now, let us confine ourselves as closely as possible to just one question. At what age shall I begin?

To answer this question at once with a sweeping generality, I reply: Begin almost as soon as the colt is born! We can fill in details as we go along. Bear in mind that your business is to educate a trotter, and in all training, education can't begin too early. This general principle applies just as certainly to horses as to men, and is equally true of both. I am fully aware that I am not entering that vast disputed territory, Early Training; and I believe I do it with my eyes wide open, and to a great extent aware of my responsibility. I have read most, I believe, that has been published for and against; and after all my reading and thinking, I grow stronger in the conviction that, to obtain anything of supreme excellence we must begin early to obtain it; and the more especially, where the end involves a process of training or education. And I therefore, say again that, if you want a trotter of the highest order, you must begin from the earliest period in colt existence to train for it. You may have a boy that is a born musician—a musical genius, if you please—and yet he may never reach the highest excellence, or obtain renown, for the reason that you did not begin early enough.

There is a formative period in all animal life, and this is always in the strongest, if not in the largest, sense in youth. It is not enough that my boy has all the instincts and aptitudes of a musician in his soul, there is a mechanical education required; and this must be attended to while that mechanism is being built, and before it has hardened into fixed habitudes.

To illustrate: If my son was born to the heritage of Paganini or Ole Bull, I should put a violin into his hand as soon as he could hold one, that his hand and fingers might grow to the fingerboard, and learn to follow the eye and will with lightning-like rapidity, and should not wait until the hand needed to be broke to the instrument. Just so with my colt: I don't wait to break him to trot, but I begin as quickly as he is born, to educate him to trot. It is not enough that he is born a trotter; nature don't make Goldsmith Maids. A child a few days old will learn to cry, to be rocked and to be walked with, and philosophically tell us that, when it has learned this, it is old enough to learn something else—to take an education; and so I say that, as soon as a colt can use its feet, it is old enough to use them in the direction of 2:14, or even two minutes.

Close observers and patient students have told us that horses trot quite as much with their heads as with their heels, that a trotting brain is as necessary as trotting legs; and we are beginning to learn the lesson, with the result of greater certainty in breeding and greater speed after. Begin then, to familiarize a colt's brain with all that it will know on the course, and its legs with the true line of speed that they must know in the future. Am I then an advocate of early forcing? Do I approve of early maturity? Let me answer these questions in my own way.

A great deal of prejudice clings to these terms and a great many sophisms surround them. Let us, if we can, lay aside prejudice, and endeavor to see through the sophisms. And first, about early forcing. I believe always in harmonious development. And as long as we force matters along this line, we cannot force too strongly or too rapidly. If we force one thing to the injury of the other parts, then we have, in man or beast, an unbalanced, lop-sided, crooked, inharmonious organism; and in this sense, I do not believe in the forcing process either for man or beast.

For instance, if, to obtain rapid growth you stimulate the digestive and assimilative organs at the expense of the muscular and fibrous, you have a large but weak organism—inharmonious; and I don't believe in such forcing.

But if you can get a large and rapid growth of the whole organism by generous care and feeding, then I devoutly believe that you can't force too much, and that such an organic up-building is infinitely better than the reverse process. I remember very well the time when the good old farmer-father thought that in order to make his boy manly and tough, he had to rouse him out of his bed long before daylight, force him out into the biting blasts of winter, and without much sentimental nonsense about what he ate or drank. A good many of us kicked against this kind of early forcing, but we had to get up and dig away at it all the same. On just this theory a great many are seeking to raise tough and hardy horses, by the root-hog-or-die process. It passes my comprehension how an imperfectly nourished growth tends to hardness, except in a wrong way. But we hear a great deal about this, and that thing being unnatural. Now, the sophism in this lies right on the surface. Neither horse nor man that we are talking about, is living in a state of nature; we are both lifted entirely out of it and into new conditions, with new duties, needs and requirements.

The horse, in spite of nature, picks up a precarious and capricious living, and on nature's nursing lives its stunted life, propagates after its kind, and grows thus, not into a higher, but a constantly increasing lower life. I only suggest the sophism, leaving the intelligent reader to pursue the thought at his leisure.—"Index," in "World."

The horse excels in the animal kingdom in point of his quick perception; but to perfect this to a proper degree his training, like man education, should be under good discipline. An expert horse trainer is as essential and valuable in his line of business as the experienced master to the advancement of a promising pupil. Perception is animal intelligence, and can be toned to a lower or higher grade according to the natural instinct of the animal, and the skill manifested by the trainer. The horse displays obedience and the worth of his industrial powers in the field as a valuable and indispensable assistant to man in tilling the soil. He has proved his best friend, in saddle and harness, and his faithful prop in unhappy welfare. On the gory battlefield, when shot and shell fell thick and fast, and a fatal ball caused the luckless

rider to fall lifeless to the ground, did the stately war horse always prance and canter off in terror, in a seeming狂妄 to life and death. No! While his bridle trailed the ground he gazed on his dying master, though the battle raged on, while he neighed and nickered in his peculiar manifestations of grief, so great was often the strength of his affection and obedience. On the race track the horse has often displayed a quick perception in his fiery spirit, in flank movements over his rivals, in bravery and unfaltering energy. We might cite McWhirter as an illustration in this connection. During his last race at St. Louis, Mo., after breaking one of his ankles he continued to run on three legs, and why? Philosophy might tell us that his training had reached a fine point," and that his perception was such that he knew he had entered the track for a purpose, and determined to win the race or lose a life in the effort.

The sensational trotters of the season thus far are found in the big black geldings Erebus and Alexander. The first heard of Erebus by us was at Philadelphia last week, for the first time he was sent to win the 2:40 class, the first heat of which was the fourth mile that the horse had ever trotted in company, 2:31½ being the fastest Erebus had ever trotted up to the beginning of the race. In the first heat Erebus shot out like a locomotive, secured the pole at once, reached the quarter in 37¾, half 1:12¾, and jogged home in 2:39¾. In the second heat the quarter was reached in 35¾, half 1:10¾, and literally walked under the wire in 2:38¾. This looks as though Huntington's Clay Show Horse might be cast in the shade before the summer is ended. Erebus is half an inch less than 17 hands, high 10 years old, got by Scott's Hiawatha, out of a thoroughbred mare, just about the kind of breeding from which we might have looked for a phenomenal trotter. Alexander is also a black gelding, but is only 15½ hands in height. He is eight years old, was not broken to harness until five, was found to be fast at six, ran out last year, was taken up this spring by Voorhees D. Conover, who broke him and placed him in the 3:00 class, at Suffolk, where he won two races off the reel and obtained a record of 2:20¾. He is by Happy Medium; dam by Bully King, son of George M. Patchen. Little less sensational was the performance of Mambrino Sotham, a horse sold by Mr. H. V. Bemis, of this city, to Col. M. Shaughnessy, of Salt Lake City, when the former gentleman disposed of all his trotters. Sotham was one of a pair when Mr. Bemis owned him, and was worked up a little by Mat Colvin but after he became the property of Col. Shaughnessy, he passed into Alex. Lewis' hands, whose methods seem to agree with ours, as he wins all his races down and secured a record of 2:25. The mate to Mambrino Sotham was Mambrino Sturges, a horse which Colvin liked the best and to whom he gave a record of 2:32¾, in 1881. Both were by Mambrino Gift, and we doubt not both are real trotters.—*Spirit of the Turf.*

A rather stiff breeze was blowing at Charter Oak Park Thursday afternoon last, as Maud S. was driven on the track in front of the grand stand to an ordinary road wagon weighing over one hundred pounds. About 200 persons were present. Promptly at 3 o'clock the number "Go!" was given, and she flashed by at a rapid rate. She passed the quarter in 37 seconds, and to the half, which she passed in 1:12; she held her own without a break. Here Brailey slightly urged her, and she passed the third quarter in 34 seconds from the half. On the homestretch she fairly seemed to fly, and when she increased her now terrific pace at a point 200 yards west of the judges' stand the spectators rose to their feet and a mighty shout rent the air. Under the wire she passed without a skip, and when the time 2:18 was announced, another round of applause greeted her. The last quarter was made in 32 seconds, or at a 2:08 gait.

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The following special purses are offered by the managers of the Chicago Driving Park: \$1,000 to the trotting double team to wagon who shall beat the fastest record at that way of going—2:15½; \$1,000 to the trotter under saddle who shall beat the fastest record at that way of going—2:12¾; \$1,000 to the trotter to wagon, hitched with running mate, who shall beat the fastest record at that way of going—2:11; \$1,000 to the trotter in harness who shall beat the two-mile record—4:46.

J. W. Sutherland, Smithfield, O., writes: I have seen in the Pittsburgh Stockmen an account of the death of Riffeman, reputed to be the oldest stallion in America, age twenty-nine years. I have on my farm Old Champion Blackhawk, who was sired by Hill's Black Hawk, who is half and hearty and doing service this spring, at the age of thirty-three years, and is as "game" as a three-year-old.

The 5-year-old trotter, Jay-Eye-See, trotted a mile in Cleveland Saturday, going on the middle of the track in 2:16¾, the greatest performance of any horse at this time of year. The first and last quarters were trotted in 8' Span, Hickok and Bither say that the track is the fastest they ever saw, and have written to the Stockmen to have it measured. They say she can beat her record without doubt.

When horses eat their oats too rapidly the evil may be checked by placing some clean cobblestones in the box. The horse will then be compelled to pick his oats slowly, masticeating them more thoroughly, and they will do him much good than if hurriedly eaten in the ordinary way.

If your horses have sore shoulders, scratches, cuts or open sores of any kind, use Stewart's Healing Powder.

SHORTHORN CATTLE.—J. F. Finley, Breckinridge, Ky., breeder of Shorthorn cattle and Berkshire Swine. Imported Kirklevington Lad at head of herd. Stock for sale at all times.

H. C. TAYLOR, Bremen, Ga., breeder of Shorthorn cattle, Polled and Horned. Imported Kirklevington Lad at head of herd. Stock for sale at all times.

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H. C. TAYLOR, Bremen,

The Home Circle.

THE HAMMER AND THE SAW.

There's the music of the birds,
And the music of the bees;
There's the music of the forests
In the grand old trees;
Nature's symphony is sweet,
And without a single flaw,
Yet there's nothing like the music
Of the Hammer and the Saw:
Hail to Liberty and Peace!

Hail to Order, Heaven's first law!
And the world's ennobling chorus
Of the Hammer and the Saw.

Though the little birds may sing,
And the bairns zeppher blow,
Yet the lader may be empty,
And the wheat crop low;

But when labor strikes a note,
Then the heart that was in awe
Dances lightly to the music
Of the Hammer and the Saw.

Hail to Liberty and Peace!
Hail to Order, Heaven's first law!
And the world's ennobling chorus
Of the Hammer and the Saw.

The man may not be skilled
For the harp or for the lyre,
But he can sing an inspiration
From ambition's noble fire,

"I'll earn my bread and straw,
Though," he cries, "a crust and straw,
While I'm climbing to the music
Of the Hammer and the Saw."

Hail to Liberty and Peace!
Hail to Order, Heaven's first law!
And the world's ennobling chorus
Of the Hammer and the Saw.

—Mrs. M. A. Kidder, in N. Y. Ledger.

Another Schoolma'am.

I have been a reader of your paper for some time, and am always interested in the Circle. I greatly admire May Myrtle's poetry, and Idyl's letters.

To Schoolma'am I would say I am a "sister in the profession." I live in south-eastern Kansas and like it better than any other place I have ever visited, if we do have some pretty strong winds. I think Kansas far ahead of many of the older states, although some eastern people seem to think it a land of heathenism and rattlesnakes. Perhaps it is because they have never visited the West.

To such I would say if you have any desire so to do, come and see for yourselves and perhaps you will be satisfied as to the result.

GERTRUDE.

June, 1883.
Welcome Gertrude to the Home Circle. When writing again please sign your own name as well as your nom de plume.

An Indian In Camp.

Again permit me a small space in your columns; that is, a small corner where the critics will not get hold of me, for you cannot expect as much off an Indian as you do of our white brothers, such as Bon Ami, Paulus and Christopher Columbus. Our war is about over, and most of the Creek Indians have gone to work, but here we will let the Creeks flow silently by, for fear we will have them to fad, and I will try to tell you something about our country.

We have one of the finest farming countries in the world. The Creeks have a much better farming country than we (the Cherokees) have, but for stock, we have equally as good. The prairies around Muskogee are mostly hilly, and on some of the hills you can see for miles; most of the hills are rocky, flint and sandstone; the flint such as was used by our people in old times for making arrowheads, hatchets and knives. I have quite a collection of these old relics. Here where we live, on the banks of the Arkansas river, used to be an old battle ground, and in the late war there were some of the old Indians that used their bows and arrows. I was surprised when Es pe hi Chee and his band were brought in by the soldiers to see some of them with their bows and arrows and blankets, as I thought the Creeks had quit those old habits of dress.

I am a Cherokee, but have lived among the Creeks the most of my life, yet did not know there were any so far behind the fashion. The style of cooking among us will last as long as the Indian. The first thing a full-blood does, when his company comes in, is to set out a bowl of softy, as it is called in our language, which is a kind of soup made of corn boiled and set away for two or three days; that is a token of friendship. Then, for traveling, they have what is called en puce, or cold flour, which is made of corn parched in ashes and then pounded into flour. This, put away in water, is a very good drink in warm weather.

I believe I commenced to write about our country and am about lost in the hills, so will now try to find my way out and tell about it the next time.

FARMER.

Muskogee, I. T. June 1, 1883.
The Indian is welcome to the Home Circle, and will, we hope, soon come again.—ED. R. W.

Weary Women.

Nothing is more reprehensible and thoroughly wrong than the idea that a woman fulfills her duty by doing an amount of work that is far beyond her strength. She not only does not fulfill her duty, but she most signally fails in it; and the failure is truly deplorable. There can be no sadder sight than that of a broken-down, overworked wife and mother—a woman that is tired all her life through. If the work of the household cannot be accomplished by order, system and moderate work, without the necessity of wearing heart-breaking toil, toil that is never ended and ever begun, without making life a tread-mill of labor, then, for the sake of humanity, let the work go. Better live in the midst of disorder than that order should be purchased at so high a price—the cost of health, strength, happiness and all that makes life endurable. The woman who spends her life in unnecessary labor is unfit for the highest duties at home. She should be the haven of rest to which both husband and children turn for peace and refreshment. She should be the careful, intelligent adviser and guide of the one, the tender and confident helpmate of the other. How is it possible for a woman, exhausted in body, as a natural consequence in mind also, to perform either of these of

fices? No, it is not possible. The constant strain is too great. Nature gives way beneath it. She loses health and spirits and hopefulness, and more than all, her youth—the last thing that a woman should allow to slip from her; for no matter how old she is in years, she should be young in heart and feeling, for the youth of age is sometimes more attractive than youth itself. To the over-worked woman this green old age comes on her sere and yellow before it is time. Her disposition is ruined, her temper is soured, and her very nature is changed by the burden which, too heavy to carry, is dragged along as long as wearied feet and tired hands can do their part. Even her affections are blunted and she becomes merely a machine—a woman without the time to train and guide her children as only a mother can, a wife without the time to sympathize with and cheer her husband, a woman so over-worked during the day that when the night comes her sole thought and most intense longing are for the rest and sleep that probably will not come, and even if it should, that she is too tired to enjoy. Better by far let everything go unfinished, to live as best she can, than to entail on herself the curse of overwork.—*Sanitary Magazine.*

Good Health.

The Petunia Cure.

Mrs. H. M. Lewis, of *The Western Farmer*, has written pleasantly and suggestively of a discouraged young woman, who, having worse than wasted her substance on doctors and druggists, at last had the good fortune to meet a true friend of sense, who plainly told her she had foaled away time and money enough in the demoralizing atmosphere of a city, shut out from the fullness and life of God's sunshine and pure air. So florid culture was prescribed as a certain and pleasant panacea;

"Try cultivating the petunia in the highest style of art. Search the catalogues and get the best seeds and plants. After that prepare the soil; let it be rich leaf mould, and guano. Stir and work it all yourself, and before the summer is over you will be as well as any of us."

In sheer desperation, and with feeble faith, she acted on this hint; advanced by easy stages, and is now healthy and happy, and, naturally enough, enthusiastic about the chosen plant which was the agent of her rescue:

"First, she obtained the best possible seeds of single varieties; next, purchased from the greenhouse young plants and cuttings of double and semi-double varieties; these were put out in the garden as soon as the weather permitted in spring, and when the flowers appeared, if one of inferior quality was seen, it was ruthlessly pulled up. In this way she succeeded in getting only true, free-blooming, brilliant flowers. They showed themselves in many shades of rose-color, in brown, pink, purple, crimson, white, dark violet, and three varieties of green—one of them of great size. Some were fringed, others blottedched, striped and bordered, while others were covered with a net-work of purple, green, or brown. Some of the flowers were as small as a 10 cent piece, others as large as a hollyhock; and one year she originated four varieties of double ones—one a pinkish flesh color that would have been a treasure had a professional florist originated it. It was astonishing that scores of visitors came from far and near to see the beautiful flowers that were the talk of the country. In growing these flowers, she assisted by bees and insects, slightly interfered with nature's workings. The pollen from one flower was carefully sifted upon the pistil of another, and thus impregnating some of the flowers, rare beauties were produced that astonished herself and friends—for a number of her hybrids were entirely new. When the double and single are fecundated in this manner the result is a double or semi-double one. This is the only way by which seeds can be obtained from double varieties."

A friend who started in the nursery business with one acre of land and now has 400 acres devoted to all manner of ornamental plants, said in a recent note to us: "If women and men, too, would spend more time in the open air, with a little light labor, there would be fewer doctor bills to pay. I should not have been here to-day had I led an indoor life. Of this I am well assured."

Useful Recipes.

LIQUID GLUE.—S. L. M. writes: Will you please give me a recipe for making a good liquid glue from common glue?

A. Fill a glass jar with broken glue of the best quality, then fill it up with acetic acid, keep the jar in hot water for a few hours, until the glue is all melted, and you will have an excellent glue always ready.

WHITEWASH.—The following is a good way to mix whitewash so it will not rub off: Mix up half a pailful of lime and water, ready to put on the wall; then take one-quarter pint of flour, mix it up with the water; then pour on it boiling water, sufficient quantity to thicken it; pour it while hot into the whitewash, stir all together and it is ready for use.

A SIMPLE GLUE POT.—There are a great many tins, truthfully says one of our contemporaries, when a glue pot in the house is a "well spring of pleasure," and she not only does not fulfill her duty, but she most signally fails in it; and the failure is truly deplorable. There can be no sadder sight than that of a broken-down, overworked wife and mother—a woman that is tired all her life through. If the work of the household cannot be accomplished by order, system and moderate work, without the necessity of wearing heart-breaking toil, toil that is never ended and ever begun, without making life a tread-mill of labor, then, for the sake of humanity, let the work go. Better live in the midst of disorder than that order should be purchased at so high a price—the cost of health, strength, happiness and all that makes life endurable. The woman who spends her life in unnecessary labor is unfit for the highest duties at home. She should be the haven of rest to which both husband and children turn for peace and refreshment. She should be the careful, intelligent adviser and guide of the one, the tender and confident helpmate of the other. How is it possible for a woman, exhausted in body, as a natural consequence in mind also, to perform either of these of

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Nothing is more reprehensible and thoroughly wrong than the idea that a woman fulfills her duty by doing an amount of work that is far beyond her strength. She not only does not fulfill her duty, but she most signally fails in it; and the failure is truly deplorable. There can be no sadder sight than that of a broken-down, overworked wife and mother—a woman that is tired all her life through. If the work of the household cannot be accomplished by order, system and moderate work, without the necessity of wearing heart-breaking toil, toil that is never ended and ever begun, without making life a tread-mill of labor, then, for the sake of humanity, let the work go. Better live in the midst of disorder than that order should be purchased at so high a price—the cost of health, strength, happiness and all that makes life endurable. The woman who spends her life in unnecessary labor is unfit for the highest duties at home. She should be the haven of rest to which both husband and children turn for peace and refreshment. She should be the careful, intelligent adviser and guide of the one, the tender and confident helpmate of the other. How is it possible for a woman, exhausted in body, as a natural consequence in mind also, to perform either of these of

which is a kind of soup made of corn boiled and set away for two or three days; that is a token of friendship. Then, for traveling, they have what is called en puce, or cold flour, which is made of corn parched in ashes and then pounded into flour. This, put away in water, is a very good drink in warm weather.

I believe I commenced to write about our country and am about lost in the hills, so will now try to find my way out and tell about it the next time.

FARMER.

Muskogee, I. T. June 1, 1883.
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A MALARIAL VICTIM.

The Trying Experience of a Prominent Minister in the Tropics and at the North.

(To the Editor.)

The following circumstances, drawn from my personal experience, are so important and really remarkable that I have felt called upon to make them public. Their truth can be amply verified:

In 1875 I moved from Canton, St. Lawrence county, N. Y., to Florida, which state I intended to make my future residence. I purchased a home on the banks of the St. John's river, and settled down, as I thought, for life. The summer following the first winter, I was conscious of most peculiar sensations which seemed to be the accompaniment of a change of climate. I felt a sinking at the pit of the stomach accompanied by occasional dizziness and nausea. My head ached. My limbs pained me and I had an oppressive sense of weariness. I had a thirst for acids and my appetite was weak and uncertain. My digestion was impaired and my food did not assimilate. At first I imagined it was the effort of nature to become acclimated and so I thought little of it. But my troubles increased until I became restless and feverish, and the physicians informed me I was suffering from malarial fever. This continued in spite of all the best physicians could do, and I kept growing steadily worse. In the year 1880 my physicians informed me a change of climate was absolutely necessary—that I could not survive another summer in the south. I determined to return north, but not to the extreme portion, and so I took up my residence at Upper Sandusky, in Central Ohio. The change did not work the desired cure, and I again consulted physicians. I found that they were unable to effect a permanent cure, and when the extreme warmth of summer came on I grew so much worse that I gave up all hope. At that time I was suffering terribly. How badly, only those can appreciate who have contracted malarial disease in tropical regions. It seemed as if death would be a greater relief than any other blessing. But notwithstanding all this, I am happy to say that I am to-day a perfectly well and healthy man. How I came to recover so remarkably can be understood from the following card voluntarily published by me in the Sandusky, O. Republican, entitled:

HONOR TO WHOM HONOR IS DUE.

EDITORS REPUBLICAN: During my recent visit to Upper Sandusky, so many inquiries were made relative to what medicine, or course of treatment had brought such a marked change in my system, I feel it to be due to the proprietors and to the public that Warner's Safe Kidney and Liver Cure accomplished for me what other medicines and physicians had failed to do. The malarial poison which had worked its way so thoroughly through my system during my five years residence in Florida, had brought me to the verge of the grave, and physicians had pronounced my case incurable; but that is not to be wondered at, as it was undoubtedly one of the worst on record. Hough Brothers, of your city, called my attention to the medicine referred to, and induced me to try a few bottles. So marked was the change after four weeks' trial that I continued its use, and now, after three months, the cure is complete. This is not written for

The Dairy.

Dairying in Arkansas.

The Fayetteville, Ark. Democrat of 31 May, has this to say of the dairy business in its neighborhood:

Some of our farmers think the making and sale of butter is too small and unprofitable a business to engage in. They are very much mistaken, as the following "butter item" evidences: Our merchant, Mr. John Q. Benbrook, handles all the butter made by Mr. David Divilbiss, a good and prosperous farmer living in Richland township. Since the first of January he has bought from Mr. D. 333 1-2 pounds of butter, for which he paid him \$75. The butter was made from six cows, and at the same time Mr. Divilbiss' large family was supplied with all the milk and butter they could use. And furthermore, the butter is of such an excellent quality that it always bring five cents more on the pound than the market price.

That is \$15 per month for six cows or \$20 per month for each cow. In our last week's issue we said:

T. W. Virden of Godfrey, Illinois, is a successful dairyman. He has fourteen cows, three-quarter Jerseys, from which he made last week 100 lbs. of butter. This he has customers for in Alton, who pay him 35 cents per pound for all it the year round, and have done so for five years. He breeds only to a thoroughbred bull, hence his stock is every year improving.

Here then we have cows giving one pound per day which sells for 35 cents, at which rate each would yield to the owner for the 150 days from January to 31st, May \$52.50, and for six such cows \$315 in place of the \$75 for the man of Arkansas.

Will our brother of the Democrat please point this out to Mr. Divilbiss and tell him the secret is found in good stock, a well made article and a good market, all of which are within his reach. There is a bright opening in Arkansas for good dairy work; it may be commenced by the owner testing each of his cows and finding which pays the best, then fatten the others and send to the butcher, and breed his good ones to a thoroughbred Jersey or Holstein bull.

Testing Dairy Cows.

A good idea is suggested by a correspondent of the *Country Gentleman*, who advocates the testing of the butter-producing powers of common cows as well as the Jerseys and Guernseys. He says:

"Owners and breeders of Jerseys and Guernseys in different parts of the country, from time to time, test the butter-producing powers of their herds, and of certain cows in the herd. This has of late come to be attended with considerable blowing of horns, and striped of its disguise is, I believe, understood to be an advertisement. Of course, when the animal subjected to the test performs handsomely at the pail, the result is of value to other breeders. If a test is valuable to any particular breed it is of value for the purpose of showing farmers how that breed is superior to the common stock of the country, then the same test should be applied to common cows."

"I would like to see farmers who must and will continue to breed from common stock, make periodically tests of all the cows in their dairies. An animal, even if she is a scrub, that will produce ten pounds of butter per week is of more value for breeding purposes than one that will only produce five pounds, because the chances are many that her calf will inherit the qualities of its dam. She is also of much more value in the dairy. It would be a most excellent thing for a farmer to know how many cows he is keeping that are unable to produce five pounds of butter per week. The farmer can make a test that will be approximately correct, at much less cost than that of a public test. It would not have to be sworn to, or to be advertised, and would satisfy the farmer himself, who is the only one concerned. By all means, let us have tests of our common cows as well as tests of Jerseys or Guernseys."

Establishing Cheese Factories.

By L. B. ARNOLD.

"What is the best mode of establishing and operating a cheese factory in a locality where a pretty large number of farmers own few cows each, their principal business being grain-growing?"

There are two principal modes of establishing cheese factories.

One way is to form a joint stock company for the purchase of a site, erection of buildings, and managing the business, making the amount of stock equal to the estimated cost of the plant. This stock is divided into shares the same as is done in other stock companies, and the shares taken by those who are to patronize the factory, according to the amount of patronage they respectively propose to furnish. Officers are selected to represent the company and conduct its affairs, but the business of managing the factory is usually entrusted to an executive committee of three or five of the principal stockholders. This committee erects the buildings, employs a manufacturer and looks after the concern generally, keeping things in working order and making all needful regulations. The company generally employ one or more salesmen, who sell all the products and distribute the net proceeds according to the milk furnished in producing them.

Another mode of establishing factories is for one man or a very few men, to build and own the factory and site, and to operate the same. When such a mode is adopted the farmers of the neighborhood generally bind themselves to furnish the milk of a certain number of cows for a stated number of years, in order to secure the owner or owners of the factory against loss, or, at least, to share the risk with him.

Which of these modes is the better one depends largely upon the parties who enter into the undertaking. If the stock company contains a few large dairymen, who are active, intelligent and enterprising, and interested enough to look closely to the well-working of the factory, the business can be carried on with less expense than in any other way, as it saves the patrons all the profits of a middleman between the producers and purchasers. Generally, if one man who has considerable interest in the enterprise, and is capable of managing the

business, is made an executive committee and salesmen, the stock company will be run with the least friction and expense. When the whole direction of affairs and responsibility all rest on a single, interested individual, he will, if he is not hampered with restrictions, execute the business of the company more promptly, and with better effect, than it can be done when a number of men are employed to do the same work and share the responsibility. What is everybody's business is nobody's business, and the larger the number concerned in the management of a factory the poorer that management will be. This has been the universal experience of stock companies run by large committees, and, as a consequence about four-fifths of the stock companies are run in a shabby and unprofitable manner. The work may be distributed and distinct parts assigned to different men, but the responsibility for conducting each distinct part should rest wholly upon one man.

Dairy Notes.

The healthfulness of milk depends largely upon having clear and pure water for cows. Often that which appears clear, because free from sediment, contains the germs of disease, and these surely reappear in the milk.

The high price of butter, cheese and other dairy products continues long enough to show that it is not caused by temporary crop failures. We must have a large increase of cows before they or their products are much cheaper.

It should be remembered that no matter how good and rich a milker a cow may be, it is unreasonable to expect the quantity and richness of the product to be kept up unless both the quantity and adaptability of the food are matters of attention. Do not expect impossibilities, even if you are the owner of prize milking animals.

Timothy Rogers, of Quincy, Illinois, who is operating a stock farm of one thousand and ninety-two acres near Fall Creek, Illinois, is preparing to go out of that line of business for the purpose of starting on the place an extensive creamery. The farm is specially adapted to creamery purposes, the place being supplied with abundant water privileges and as good pasture as the country affords.

It is to be expected that creamery men must make a profit in order to sustain their business, and whenever the farmer realizes that so long as he can save the sweet milk for calves and pigs, save the labor of butter-making, and sells his cream for as much as the butter per pound would bring in the local market, this is all he need ask; but get more if he can. In this way the creamery can be sustained and prove the farmer's best friend.

Prof. L. B. Arnold says the points in favor of dairying are: First, a dairy farm costs ten per cent. less to operate than grain-growing or mixed agriculture; second, the annual returns average little more than other branches; third, prices are nearer uniform and more reliable; fourth, dairying exhausts the soil; fifth, it is more secure against changes in the season, since the dairymen, who are within his reach, there is a bright opening in Arkansas for good dairy work; it may be commenced by the owner testing each of his cows and finding which pays the best, then fatten the others and send to the butcher, and breed his good ones to a thoroughbred Jersey or Holstein bull.

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Increased attention is being given to dairying throughout Northern Missouri. It has for a number of years been one of the most profitable agricultural interests in Iowa, and we are glad to see it working south. Brookfield, in Linn Co., has a creamery now in operation; there is one at Green City, in Sullivan Co., one at Kirkville and one at Clarence, in Shelby Co.; one at LaPlata and one at Cambria, in Macon Co., and there has been one at Princeton, in Mercer Co., running successfully for several years.

To produce first class gilt-edge butter from a herd of Jersey cows, the food must be pure and wholesome at all times.

Weeds in pasture or hay destroys the flavor of the butter. Rag weed and others are as injurious in a manner as wild onions.

The next great point is cleanliness, commencing at the yards and stables, and ending with the finishing of the butter. To wet cows teats while milking is a filthy practice and should never be tolerated. If these rules are strictly adhered to and the modern dairy fixtures employed, the result will be satisfactory. If it is not then the dairy maid has neglected something, or she does not understand the business.

One of the principles of modern dairy farming is to have our cows give the most milk when dairy goods are at their highest price, which is invariably in winter.

It has been repeatedly demonstrated that a good herd of cows, coming into milk in September, October and November, will, in the average, give from 4,500 to 6,000 pounds of milk annually.

The milk is worth, to sell at a factory, or to manufacture into butter or cheese, \$1.30 per hundred pounds, or \$58.50 as the average for each cow. In other words,

dairy farming with one cow to eight acres on 160 acres produces \$1.160; modern dairy farming with one cow to four acres produces \$2,660, an increase of \$1,500, by an outlay for feed and help—a net profit of \$640, a sum sufficient to raise the price of land from \$50 per acre to \$100 per acre.

Brooklyn Bridge and Mayor Beatty:

OR, GREAT PUBLIC ENTERPRISE AND SELF-MADE MEN.

On the 3d of January, 1870, the work of preparing for the foundation of the towers of the now famous Brooklyn Bridge was begun. On April 1, 1870, Daniel F. Beatty left his father's home in Hunterdon County, New Jersey, penniless.

To-day he owns the largest Reed

Organ Works in existence, and doing a business of several millions of dollars annually.

Credit is due to those who managed the great Bridge, some may be said in reference to Mayor Beatty, of Washington, New Jersey, who now is

shaking the risk with him.

Which of these modes is the better one depends largely upon the parties who enter into the undertaking. If the stock company contains a few large dairymen, who are active, intelligent and enterprising, and interested enough to look closely to the well-working of the factory, the business can be carried on with less expense than in any other way, as it saves the patrons all the profits of a middleman between the producers and purchasers. Generally, if one man who has considerable interest in the enterprise, and is capable of managing the

The Poultry Yard.

To Keep Eggs.

1. Eggs may be kept for an indefinite time if packed when quite fresh in boxes with rock alum in shape like rock salt. Put in a thick layer of alum, then the eggs, small end down, cover with alum around and over them, and keep in a cool, dry place. 2. Slack fresh lime with cold water to the thickness of cream. Pack the eggs, small end down, in a barrel or in stone jars, then pour on the cold whitewash covering the eggs. Care must be used in taking them out, as they are easily cracked. This has been used with success for forty years. 3. Three gallons of water, one pint fresh slacked lime, one half pint salt. Use perfectly fresh eggs with sound shells. If more lime is put in it eats the shell; if more salt it hardens the yolks. Put them in carefully, they will keep perfectly good for a year or more. 4. Hold perfectly fresh eggs in boiling water while counting six. A wire basket can be used for this purpose. Be sure to have water enough to entirely cover the eggs. Let them dry and cool, then pack in oats. Put a layer of oats on the bottom of the keg or barrel sufficient to support the eggs. Pack them closely, small end down, and proceed till the barrel is filled. Shake it gently to settle oats and eggs firmly. This method has given eggs a year after packing, in as good a state of preservation as when first packed, in answer to several inquiries.

A cross between the bloodied Light Brahmans and partridge Cochins, it is said produces the largest fowls known.

After chicks are a month old, cracked corn and wheat screenings are better for them than dough.

Exhibiting poultry is generally a poor practice for breeding purposes. They are generally stuffed for some time previous to the shows, in order to attain the greatest possible weight, for other points being equal, the biggest bird gets the prize.

As soon as cockerels begin to grow they should be separated from the flock. They fatten readily though they grow rapidly, and do not grow very fat before they nearly gain their full weight. They are called "virgin cocks" and command nearly as high price as capons. Hence it pays to coop them separately from the rest of the flocks, which will do better in their absence. These and all other fowls should be marketed as soon as they are so fat as to show no further increase. After a fowl is well fattened if not killed it will soon begin to fall off, and will never be so fat again. The feed of fattening fowls should be varied to tempt their appetites. They should not have too large a run. Well fed, they will fatten in about three or four weeks in September or October, and require more feed as the weather grows colder.

Mr. L. K. Felch being asked the three breeds he would select, if confined to thoroughbred fowls, answered: Light Brahmans, Plymouth Rocks, and White Leghorns. But were he to give up all save those from which he could secure the very best results in eggs, broilers and roost fowls, he would keep fine Light Brahma hens in numbers, mated to a White Leghorn cock, would lay eggs enough for incubating purposes—the laying stock, broilers and poultry thus beginning a cross-breed, Brahma and Leghorn.

They will lay the best in all seasons of the year, and while the eggs are larger and generally dark-colored the hens lay as many as do the pure Leghorns, while the poultry is as nice as can well be. There will be enough among them that will become broody in the whole, and much annoyance often experienced from setting hens is in this way dispensed with.

The Pig Pen.

Jersey Red Register.

SECRETARY'S OFFICE,
ELK HORN, WIS., Mch. 26th, 1883.

EDITOR COLMAN'S RURAL WORLD: The importance and necessity of herd or record books in breeding is well known to all successful breeders. Recording animals and tracing lineage cannot be too carefully performed. The more care the greater the value of the animal, that has a rich inheritance of a long line of meritorious ancestors. The "American Jersey Red Swine Club," has but recently been organized and a constitution issued, of which I send you some copies, also blanks for registration of animals. We solicit your co-operation, would be pleased to have you become a member, and register whatever animals you deem best to build up an enviable reputation. We are very confident that the breeder who is willing to keep a careful record, which he willingly invites the public to inspect and criticize, shows at once that he is willing to exercise care and to place each step on record. These written and recorded pedigrees promote integrity, and assist in building up and establishing a line of pure bred stock, and it is self-evident, that a pure breed of animals cannot be kept without keeping accurate records of all animals used as breeders. The time has passed when buyers will be content and satisfied with verbal pedigrees—as well trace title to real estate by some one's say so. They must be recorded so as they can be verified. Please give me a list of your partners, postoffice &c. Adjourned meeting June 1st, 1883.

Orchard Grass for Pigs.

Orchard grass, says F. D. Curtis, of New York State, writing to the Tribune, is a most valuable grass for permanent pig pasture on account of its starting so early in spring and its continuous growth during the entire season. It is the least affected by drought, or any grass with which I am acquainted, and it will also furnish the largest amount of fresh seed. Clover and timothy will furnish a greater bulk of hay, but neither of them, and especially timothy, which is very poor, will furnish anything like the amount of aftermath. Orchard grass on rich land can be mown three times in a year, and, of course, when used for pasture there is the same vigorous growth. I have known it to furnish a good fresh bite three days after being cut close to the ground, hence I am satisfied that it is the superior of any other

grass for permanent pasture. It will not run out like clover and timothy, as its long fibrous roots take a rank and deep hold of the ground, uniting at the top in a tussock or crown from which numerous blades of grass grow.

Success in raising pigs depends upon feeding liberally till the pigs are three or four months old. Let them have the run of a grass or clover pasture, and after the harvest, when the wheat stubble, the cost of raising in this way is very little. In the winter they will need richer food. They should have warm quarters with plenty of straw.

The practice of some of the best farmers is to keep pigs through the summer on green food, cut and carried to the pens, with a little grain, and what milk can be spared after butter-making. Spring pigs are thus made to weigh 200 pounds at seven months old, and, except in the last month, they get little grain. The best time to sell such pigs is at the beginning of cold weather, usually in October.

**STRICTLY PURE.
HARMLESS TO THE MOST DELICATE.**



This engraving represents the lungs in a healthy state.

SAMARITAN NEVER FAILS. NERVINE

"You claim too much for SAMARITAN NERVINE," says askeptic. "How can one medicine be a specific for Epilepsy, Dyspepsia, Alcoholism, Opium Habit, Rheumatism, Spondylitis, &c., &c.?" We claim it a specific, simply, because the virus of all diseases arises from the blood. Its Nervine, Resolvent, Alterative and Laxative properties meet all the conditions herein referred to. It's known world wide as

THE GREAT NERVE CONQUEROR.

It quietes and composes the patient—not by the introduction of opium or its extracts, but by the action of activity on the stomach and nervous system, whereby the brain is relieved of morbid fancies, which are created by the causes above referred to.

The Clergy, Lawyers, Literary men, Merchants, Bankers, Physicians and all those whose sedentary employment causes nervous prostration, irregularities of the blood, stomach, bowels or kidneys or who require a nervous tonic, appetizer or stimulant, SAMARITAN NERVINE is the medicine. None has ever equaled the sinking system.

\$1.50. Sold by all Druggists.

For testimonials and circulars send stamp.

DR. G. A. HIGDON MED. CO., PHOENIX, ST. JOSEPH, MO.

TO HAVE IS—

PERRY DAVIS' PAIN-KILLER,

It brings Speedy Relief in all cases of Sprains and Bruises.

HALL'S Vegetable Sicilian HAIR RENEWER

was the first preparation perfectly adapted to cure diseases of the scalp, and the first successful treatment of baldness. It has a decided color, growth, and芳臭, and is said to have no equal. It has no equal in the market. It is a powerful invigorator, but none have so fully met all the requirements needful for the proper treatment of baldness. It is a sovereign remedy, and steadily grown in favor, and spread its fame and usefulness to every quarter of the globe. Its unique properties can be attributed to but one cause: *the secret of its power*.

The use of a short time of HALL'S HAIR RENEWER wonderfully changes and improves the complexion, removes all skin eruptions, all improprieties, cures all humors, fever, and dryness, and thus prevents baldness. It stimulates the whole glandular and cerebral system, to push forward a new and vigorous growth. The use of this article are not transient, like those of algebraic preparations, but remain a long time, which makes its use a matter of economy.

BUCKINGHAM'S DYE FOR THE EYES.

WELLERS

The Stock Pards.

Weekly Review of the Live Stock Market.

By an unfortunate error last week, Hunter, Evans & Co., were not given due credit in sales made.

The two yards have gotten up a horse race; the Union Yards enter Gypsy, a running pony, which it is said has beaten all local cracks, except the Sherlock horse Possum; the National Yard men enter Billy the Kid, a roan Texan, five years old, without a record, owned by Fred Otto. The race is for \$100 a side, to be run on the Cote Brilliant track Saturday, June 23d.

Maj. W. R. McFarlane, of Walker, Vernon Co., Mo., has a big string of well fed cattle to Hunter, Evans & Co., 118 head in number, for which \$600 was received. Maj. McFarlane ranks well as a feeder.

WEDNESDAY, June 13, 1883.

Receipts for 24 hours; cattle 2794, hogs 5986 sheep 1538.

CATTLE—The depression noted during the week vanished into thin air, and activity and strength took the place of sluggishness and weakness. There was a place for every grade of stock; stockers and feeders and butcher stuff all saleable but for these grades nothing was added in value; shipping cattle good and of light weight, however, took on about 10¢ and the movement was brisk. All grad of shipping steers, were better in tone and livelier from the first, but heavy cattle took on little if any quotable strength, though the movement and firmness gave rise to considerable additional 10c talk. Representative sales:

18 native steers.....	1521	6 00
20 native steers.....	1183	5 35
19 grass Texans.....	935	4 00
41 native steers.....	1221	5 55
35 native steers.....	1037	5 15
35 native steers.....	1206	5 60
15 native steers.....	1309	5 25
22 corn-fed Texans.....	974	5 12½
22 corn-fed Texans.....	946	5 12½
40 native steers.....	1101	5 00
39 native steers.....	1187	5 37½
90 native steers.....	1143	5 45
16 native steers.....	1178	5 30
50 Arkansas mixed.....	593	3 25
23 native steers.....	1097	5 35
15 butcher steers.....	983	5 30
12 butcher steers.....	1039	5 40
20 wintered Texans.....	886	4 40
23 wintered Texans.....	796	4 00
18 butcher steers.....	1073	5 30
22 butcher steers.....	946	5 25
12 butcher steers.....	955	5 00
18 butcher steers.....	1170	5 35
18 butcher steers.....	1299	5 00
17 butcher steers.....	1287	5 35
22 butcher steers.....	1088	5 20
67 corn-fed Texans.....	992	5 00
60 corn-fed Texans.....	946	5 00
40 native steers.....	1101	5 00
43 grass Texans.....	913	5 00
44 grass Texans.....	820	5 25
20 native stockers.....	888	4 35

HOGS—Ten cents lower all round. Light hogs we quote at \$6 40@6 50¢; common to fair mixed packing \$6 00@6 25¢; fair to good packing \$6 40@6 60¢; butchers and Philadelphia \$6 60@6 75¢; pigs \$5 40@6 60¢, and at these declines the market closed steady. Representative sales:

48.....208.....\$6 35	13.....186.....\$6 40
53.....203.....6 50	61.....256.....6 65
52.....193.....6 50	56.....199.....6 50
43.....199.....6 45	13.....317.....6 65
53.....203.....6 70	12.....200.....5 85
37.....200.....6 70	29.....200.....5 85
33.....346.....6 25	27.....376.....6 40
36.....188.....6 45	59.....203.....6 50

SHEEP—The turn came at last, and the first evidence was that the buyer took the stock early at extreme range of \$2 00@4 35.

CATTLE—Market for shipping cattle slow at unchanged prices under light receipts.

Good butchers cattle scarce and market ruled fairly active to extent of supply, but green butchers stuff and old cows slow and weak.

There was a moderate inquiry for native stockers at a lower range of prices.

Good to choice fat Texas and Indian cattle selling fairly active, but thin to fair-fleshed not wanted, and it was uphill work to dispose of them at a decent price. Representative sales:

16 native cows.....	602	\$4 00
21 grass Texans.....	846	4 25
20 grass Texans.....	865	4 50
15 native butchers.....	1052	5 35
16 native butchers.....	1055	5 45
20 southwest steers.....	1015	5 00
10 native stockers.....	275	5 00
10 native sheep.....	75	2 50
16 native sheep.....	65	2 30
29 native sheep.....	72	2 00
33 native sheep.....	71	2 00

TUESDAY, June 12, 1883, 2 p.m.

CATTLE—Market for shipping cattle slow at unchanged prices under light receipts.

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There was a moderate inquiry for native stockers at a lower range of prices.

Good to choice fat Texas and Indian cattle selling fairly active, but thin to fair-fleshed not wanted, and it was uphill work to dispose of them at a decent price. Representative sales:

16 native cows.....	602	\$4 00
21 grass Texans.....	846	4 25
20 grass Texans.....	865	4 50
15 native butchers.....	1052	5 35
16 native butchers.....	1055	5 45
20 southwest steers.....	1015	5 00
10 native stockers.....	275	5 00
10 native sheep.....	75	2 50
16 native sheep.....	65	2 30
29 native sheep.....	72	2 00
33 native sheep.....	71	2 00

TUESDAY, June 12, 1883, 2 p.m.

CATTLE—Market for shipping cattle slow at unchanged prices under light receipts.

Good butchers cattle scarce and market ruled fairly active to extent of supply, but green butchers stuff and old cows slow and weak.

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